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     (FILE 'HOME' ENTERED AT 11:12:57 ON 22 AUG 2007)

     FILE 'REGISTRY' ENTERED AT 11:13:13 ON 22 AUG 2007
L1             1 S DEXTRAN/CN

     FILE 'CAPLUS, MEDLINE' ENTERED AT 11:14:16 ON 22 AUG 2007
L2             6 S L1 AND LACTOBACILLUS CASEI SUBSP?
L3           105 S L1 AND LACTOBACILLU?
L4           105 S L1 AND LACTOBACILLUS
L5             3 S L4 AND PROMOT?
L6           102 S L4 NOT L5
L7             2 S L6 AND PROLIFER?
L8           100 S L6 NOT L7
L9             5 S L8 AND MOLECULAR WEIGHT?
L10           95 S L8 NOT L9
L11            0 S L10 AND MW
L12           47 S L10 AND BACTER?
L13           10 S L12 AND FOOD?
L14           37 S L12 NOT L13
L15           48 S L10 NOT L12
L16            8 S L1 AND CASEI SUBSP?
L17            2 S L16 NOT L2
L18            2 S L15 AND FED
L19        35867 S L1
L20         3434 S L19 AND MOLECULAR WEIGHT?
L21            0 S L20 AND BIOFID?
L22            0 S L20 AND LACTIC BACTER?
L23            3 S L20 AND LACTIC ACID BACTER?
L24           33 S L19 AND LACTIC ACID BACTER?
L25          125 S L19 AND FED
L26           12 S L25 AND FOOD?
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     (FILE 'HOME' ENTERED AT 11:12:57 ON 22 AUG 2007)

     FILE 'REGISTRY' ENTERED AT 11:13:13 ON 22 AUG 2007
L1             1 S DEXTRAN/CN

     FILE 'CAPLUS, MEDLINE' ENTERED AT 11:14:16 ON 22 AUG 2007
L2             6 S L1 AND LACTOBACILLUS CASEI SUBSP?
L3           105 S L1 AND LACTOBACILLU?
L4           105 S L1 AND LACTOBACILLUS
L5             3 S L4 AND PROMOT?
L6           102 S L4 NOT L5
L7             2 S L6 AND PROLIFER?
L8           100 S L6 NOT L7
L9             5 S L8 AND MOLECULAR WEIGHT?
L10           95 S L8 NOT L9
L11            0 S L10 AND MW
L12           47 S L10 AND BACTER?
L13           10 S L12 AND FOOD?
L14           37 S L12 NOT L13
L15           48 S L10 NOT L12
L16            8 S L1 AND CASEI SUBSP?
L17            2 S L16 NOT L2
L18            2 S L15 AND FED
L19        35867 S L1
L20         3434 S L19 AND MOLECULAR WEIGHT?
L21            0 S L20 AND BIOFID?
L22            0 S L20 AND LACTIC BACTER?
L23            3 S L20 AND LACTIC ACID BACTER?
L24           33 S L19 AND LACTIC ACID BACTER?
L25          125 S L19 AND FED
L26           12 S L25 AND FOOD?
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L1 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Dextran
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF Unspecified
CI PMS, COM, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

L2 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:319916 CAPLUS
DOCUMENT NUMBER: 144:411561
TITLE: Oral immunoadjuvant activity of Lactobacillus casei subsp. casei in dextran-fed layer chickens
AUTHOR(S): Ogawa, Tomohiko; Asai, Yasuyuki; Sakamoto, Hiromi; Yasuda, Kenji
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, 1851-1 Hozumi, Mizuho, Gifu, 501-0296, Japan
SOURCE: British Journal of Nutrition (2006), 95(2), 430-434
CODEN: BJNUAV; ISSN: 0007-1145
PUBLISHER: CABI Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We recently reported that symbiotic Lactobacillus casei subsp. casei together with specific substrate dextran elicited an enhancement in humoral immune response against bovine serum albumin (BSA) as a model antigen in BALB/c mice. The present study was designed to evaluate the oral immunoadjuvant effects of the symbiotic in layer chickens. Using a PCR assay, L. casei subsp. casei was detected specifically in the intestinal chyme of chickens (10 d of age, Julia strain) fed ad libitum on a diet supplemented with 75 mg dextran/kg (dextran-supplemented diet, DSD) and administered orally with 107 colony-forming units (CFU) L. casei subsp. casei in 0·1 mL PBS with the aid of an intubation needle at 1, 2 and 3 d of age. Furthermore, oral administration of 107 CFU L. casei subsp. casei at 1-3 d of age significantly enhanced the production of anti-BSA antibody in DSD-fed chickens (60 d of age) administered orally with 1 mg BSA at 32 and 33 d of age and s.c. with 5 μg BSA at 33 d of age. In addition, among bacterial nos. tested, 106 CFU L. casei subsp. casei together with dextran induced an effective increase in humoral immune response to mixed inactivated vaccines against Newcastle disease and avian infectious bronchitis, and the treatment may be advantageous in protecting against these infectious diseases in chickens in actual application. These results suggest that dietary supplementation of L. casei subsp. casei with dextran leads to immunomodulation of humoral immune responses.
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:224198 CAPLUS
DOCUMENT NUMBER: 142:390615
TITLE: Oral immunoadjuvant activity of a new synbiotic Lactobacillus casei subsp casei in conjunction with dextran in BALB/c mice
AUTHOR(S): Ogawa, Tomohiko; Asai, Yasuyuki; Yasuda, Kenji; Sakamoto, Hiromi
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, Gifu, 501-0296, Japan
SOURCE: Nutrition Research (New York, NY, United States) (2005), 25(3), 295-304
CODEN: NTRSDC; ISSN: 0271-5317
PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In the present study, Lactobacillus casei subsp casei strains JCM 1134T (Lcc) and JCM 8129 showed the ability to use dextran, whereas other tested species of Lactobacillus, Bifidobacterium, and intestinal bacteria tested did not. The number of live Lactobacillus species increased significantly in dextran-fed BALB/c mice 30 days after oral administration of Lcc. Further, Lcc was detected

specifically using a polymerase chain reaction assay. When the BALB/c mice were orally given Lcc and its specific substrate dextran together with bovine serum albumin (BSA), a greater enhanced production of serum anti-BSA IgG was induced in comparison with those given BSA alone. These results clearly showed that a new synbiotic, probiotic Lcc and its prebiotic dextran in combination, exhibited immunoadjuvant activity in BALB/c mice.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:587603 CAPLUS
DOCUMENT NUMBER: 142:218147
TITLE: Oral immunoadjuvant activity of a new symbiotic, Lactobacillus casei subsp. casei with dextran
AUTHOR(S): Ogawa, Tomohiko
CORPORATE SOURCE: Dep. of Dentistry, Asahi University, Japan
SOURCE: Bio Industry (2004), 21(6), 61-67
CODEN: BIINEG; ISSN: 0910-6545
PUBLISHER: Shi Emu Shi Shuppan
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review discussing development of new symbiotics (combination of probiotics and prebiotics), especially a combination of lactobacilus casei casei and dextran, is provided. The effect of the symbiotic on oral immunopotentiation in chicken is also disclosed.

L2 ANSWER 4 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2007139790 MEDLINE
DOCUMENT NUMBER: PubMed ID: 17339767
TITLE: A new synbiotic consisting of Lactobacillus casei subsp. casei and dextran improves milk production in Holstein dairy cows.
AUTHOR: Yasuda Kenji; Hashikawa Shinnosuke; Sakamoto Hiromi; Tomita Yuichi; Shibata Sanae; Fukata Tsuneo
CORPORATE SOURCE: The Nagoya Research Laboratory, Meito Sangyo Co., Ltd., Kiyosu, Aichi, Japan.
SOURCE: The Journal of veterinary medical science / the Japanese Society of Veterinary Science, (2007 Feb) Vol. 69, No. 2, pp. 205-8.
Journal code: 9105360. ISSN: 0916-7250.
PUB. COUNTRY: Japan
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
(CLINICAL TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200704
ENTRY DATE: Entered STN: 7 Mar 2007
Last Updated on STN: 20 Apr 2007
Entered Medline: 19 Apr 2007
AB To evaluate the effects of a new synbiotic consisting of Lactobacillus casei subsp. casei (Lcc) and dextran (Dex) on milk production, a total of 58 Holstein dairy cows, which became pregnant and gave birth to calves at regular intervals and lactated steadily and continuously, were selected. The study had a completely randomized design, and the animals were divided into two groups. Group A was fed with a basic diet only, and Group B was fed with a basic diet supplemented with the synbiotic consisting of freeze-dried Lcc and mixed feed containing Dex for one year from August 2004. After supplementation with the synbiotic, milk yields and components of Group B were compared

with those of Group A in the August, December of 2004, April and August of 2005. Milk yields of Group B were greater than those of Group A. There were significant differences ($p<0.01$ or 0.05) between these groups for all values. Furthermore, total amounts of fat, protein and solid non-fat in Group B significantly increased in comparison with those of Group A. In addition, the somatic cell counts of Group A significantly increased in August of 2004 and 2005 in comparison with those of Group B. Thus, the new synbiotic consisting of Lcc and Dex can increase the milk production of Holstein dairy cows throughout the year.

L2 ANSWER 5 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2006165060 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16553814
TITLE: A new synbiotic, Lactobacillus casei subsp. casei together with dextran, reduces murine and human allergic reaction.
AUTHOR: Ogawa Tomohiko; Hashikawa Shinnosuke; Asai Yasuyuki; Sakamoto Hiromi; Yasuda Kenji; Makimura Yutaka
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, Mizuho, Gifu, Japan.. tomo527@dent.asahi-u.ac.jp
SOURCE: FEMS immunology and medical microbiology, (2006 Apr) Vol. 46, No. 3, pp. 400-9.
Journal code: 9315554. ISSN: 0928-8244.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
(CLINICAL TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200606
ENTRY DATE: Entered STN: 24 Mar 2006
Last Updated on STN: 21 Jun 2006
Entered Medline: 20 Jun 2006

AB We studied the development of atopic dermatitis-like skin lesions in NC/Nga mice and the allergic symptoms and blood patterns of healthy volunteers during the cedar (Cryptomeria japonica) pollen season in Japan following oral administration of a new synbiotic, Lactobacillus casei subsp. casei together with dextran. The combination of L. casei subsp. casei and dextran significantly decreased clinical skin severity scores and total immunoglobulin E levels in sera of NC/Nga mice that had developed picryl chloride-induced and Dermatophagoides pteronyssinus crude extract-swabbed atopic dermatitis-like skin lesions. During the most common Japanese cedar pollen season, synbiotic L. casei subsp. casei and dextran in humans led to no significant changes in total nasal and ocular symptom scores, in the levels of cedar pollen-specific immunoglobulin E, interferon-gamma and thymus and activation regulated chemokine or in the number of eosinophils in sera, whereas the placebo group showed a tendency for increased levels of cedar pollen-specific immunoglobulin E, thymus and activation regulated chemokine and number of eosinophils, and a decrease in interferon-gamma levels. Thus, the oral administration of synbiotic L. casei subsp. casei together with dextran appears to be an effective supplement for the prevention and treatment of allergic reactions.

L2 ANSWER 6 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2006083023 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16469163
TITLE: Oral immunoadjuvant activity of Lactobacillus casei subsp. casei in dextran-fed layer chickens.
AUTHOR: Ogawa Tomohiko; Asai Yasuyuki; Sakamoto Hiromi; Yasuda Kenji
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, 1851-1 Hozumi, Mizuho, Gifu 501-0296, Japan..

tomo527@dent.asahi-u.ac.jp
SOURCE: The British journal of nutrition, (2006 Feb) Vol. 95, No. 2, pp. 430-4.
Journal code: 0372547. ISSN: 0007-1145.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200603
ENTRY DATE: Entered STN: 11 Feb 2006
Last Updated on STN: 15 Mar 2006
Entered Medline: 14 Mar 2006

AB We recently reported that synbiotic Lactobacillus casei subsp. casei together with specific substrate dextran elicited an enhancement in humoral immune response against bovine serum albumin (BSA) as a model antigen in BALB/c mice. The present study was designed to evaluate the oral immunoadjuvant effects of the synbiotic in layer chickens. Using a PCR assay, L. casei subsp. casei was detected specifically in the intestinal chyme of chickens (10 d of age, Julia strain) fed ad libitum on a diet supplemented with 75 mg dextran/kg (dextran-supplemented diet, DSD) and administered orally with 10(7) colony-forming units (CFU) L. casei subsp. casei in 0.1 ml PBS with the aid of an intubation needle at 1, 2 and 3 d of age. Furthermore, oral administration of 10(7) CFU L. casei subsp. casei at 1-3 d of age significantly enhanced the production of anti-BSA antibody in DSD-fed chickens (60 d of age) administered orally with 1 mg BSA at 32 and 33 d of age and subcutaneously with 5 microg BSA at 33 d of age. In addition, among bacterial numbers tested, 10(6) CFU L. casei subsp. casei together with dextran induced an effective increase in humoral immune response to mixed inactivated vaccines against Newcastle disease and avian infectious bronchitis, and the treatment may be advantageous in protecting against these infectious diseases in chickens in actual application. These results suggest that dietary supplementation of L. casei subsp. casei with dextran leads to immunomodulation of humoral immune responses.

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:648411 CAPLUS
DOCUMENT NUMBER: 141:162415
TITLE: Intestinal environment controlling agent for oral use and normal intestinal flora growing kit for oral use
INVENTOR(S): Ito, Masaharu; Yamamoto, Kenji
PATENT ASSIGNEE(S): Ajinomoto Pharma Co., Ltd., Japan
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004067037	A1	20040812	WO 2004-JP798	20040129

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

PRIORITY APPLN. INFO.: JP 2003-21610 A 20030130

AB It is intended to provide a composition for oral use aiming at eliminating harmful bacteria and controlling the proliferation ability of useful bacteria in the intestine and a kit for normalizing intestinal flora. As an intestinal environment controlling agent for oral use, a composition containing a gelatinous osmotic pressure controlling agent such as hardly digestible dextrin or polyethylene glycol and/or a crystalloid osmotic pressure controlling agent such as an electrolyte or a saccharide is employed. Then the intestinal environment controlling agent is combined with an intestinal useful bacterium composition and an intestinal useful bacterium growth promoter. For example, an intestinal environment controlling agent was formulated containing NaCl 2.93, KCl 1.49, NaHCO3 3.37, Na2SO4 11.37, and polyethylene glycol 117 g (dissolving in 2 L water for administration). An intestinal useful bacterium composition was formulated containing Enterococcus faecium culture powder 1, starch 0.9 g, and flavors q.s. An intestinal useful bacterium growth promoter was formulated containing agar 1.5, soy bean powder 1.5, apple fiber 0.5 g, and sugar q.s.

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:80862 CAPLUS
DOCUMENT NUMBER: 140:108030
TITLE: Dextran for selective growth of Lactobacillus casei casei
INVENTOR(S): Yasuda, Kenji; Ogawa, Tomohiko; Hasegawa, Masakatsu
PATENT ASSIGNEE(S): Meito Sangyo Co., Ltd, Japan
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009800	A1	20040129	WO 2003-JP9272	20030722

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2493644	A1	20040129	CA 2003-2493644	20030722
AU 2003281529	A1	20040209	AU 2003-281529	20030722
EP 1541672	A1	20050615	EP 2003-741533	20030722
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
IN 2005CN00222	A	20070615	IN 2005-CN222	20050221
US 2006127378	A1	20060615	US 2005-521947	20050224
JP 2007112805	A	20070510	JP 2006-313106	20061120
PRIORITY APPLN. INFO.:			JP 2002-212336 A	20020722
			JP 2004-522778 A3	20030722
			WO 2003-JP9272 W	20030722

AB The growth of enteric probiotic L. casei subsp is promoted with dextran, especially the dextran with a mol.-weight of 2000 to 4000. The dextran can selectively promotes the growth of the enteric L. casei casei without constant taking and supplying the probiotic bacteria preparation or products. It also promoting immune system activity in Balb/c mice. Also given was the microbial production of dextran from sucrose with Leuconostoc mesenteroides.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 3 MEDLINE on STN

ACCESSION NUMBER:	91104071 MEDLINE
DOCUMENT NUMBER:	PubMed ID: 1702979
TITLE:	Exocellular polysaccharides produced by lactic acid bacteria.
AUTHOR:	Cerning J
CORPORATE SOURCE:	Station de Recherches Laitieres, CRJ, INRA Jouy-en-Josas, France.
SOURCE:	FEMS microbiology reviews, (1990 Sep) Vol. 7, No. 1-2, pp. 113-30. Ref: 94 Journal code: 8902526. ISSN: 0168-6445.
PUB. COUNTRY:	Netherlands
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE) General Review; (REVIEW)
LANGUAGE:	English
FILE SEGMENT:	Priority Journals
ENTRY MONTH:	199102
ENTRY DATE:	Entered STN: 29 Mar 1991 Last Updated on STN: 29 Jan 1996 Entered Medline: 25 Feb 1991

AB The production of homopolysaccharides (dextrans, mutans) and heteropolysaccharides by lactic acid bacteria, their chemical composition, their structure and their synthesis are outlined. Mutans streptococci, which include Streptococcus mutans and S. sobrinus produce soluble and insoluble alpha-glucans. The latter may contain as much as 90% alpha-1-3 linkages and possess a marked ability to promote adherence to the smooth tooth surface causing dental plaque. Dextrans produced by Leuconostoc mesenteroides are high molecular weight alpha-glucans having 1-6, 1-4 and 1-3 linkages, varying from slightly to highly branched; 1-6 linkages are predominant. Emphasis is put on exopolysaccharide producing thermophilic and mesophilic lactic acid bacteria, which are important in the dairy industry. The produced polymers play a key role in the rheological behaviour and the texture of fermented milks. One of the main

problems in this field is the transitory nature of the thickening trait. This instability is not yet completely understood. Controversial results exist on the sugar composition of the slime produced, but galactose and glucose have always been identified with galactose predominating in most cases.

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:111584 CAPLUS
DOCUMENT NUMBER: 145:164986
TITLE: Natural killer cell activities of synbiotic Lactobacillus casei ssp. casei in conjunction with dextran
AUTHOR(S): Ogawa, T.; Asai, Y.; Tamai, R.; Makimura, Y.; Sakamoto, H.; Hashikawa, S.; Yasuda, K.
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, Gifu, Japan
SOURCE: Clinical and Experimental Immunology (2006), 143(1), 103-109
CODEN: CEXIAL; ISSN: 0009-9104
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We have reported previously that Lactobacillus casei ssp. casei, together with specific substrate dextran, exhibited an adjuvant effect of stimulating humoral immune responses against bovine serum albumin (BSA) as a model antigen in BALB/c mice. In the present study, among the Lactobacillus species tested, L. casei ssp. casei with dextran significantly elevated the natural killer (NK) cell activities in spleen mononuclear cells from BALB/c mice in comparison to L. casei ssp. casei alone or other Lactobacillus species with or without dextran. Oral administration of L. casei ssp. casei together with dextran also resulted in a significant increase of NK cell activities in healthy human volunteers. Further, L. casei ssp. casei induced significant production of interleukin (IL)-12 in human peripheral blood mononuclear cells and IL-15 mRNA expression in the human intestinal epithelial cell line Caco-2. L. casei ssp. casei with dextran in food also significantly elevated the survival rate of BALB/c mice bearing Meth-A cells. Taken together, these results demonstrate that dietary synbiotic supplementation which is a combination of the L. casei ssp. casei used as a probiotic together with the dextran, a specific substrate as a prebiotic, efficiently elicits murine and human NK cell activities.
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 2 MEDLINE on STN
ACCESSION NUMBER: 2006521977 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16946611
TITLE: Effect of Weissella cibaria isolates on the formation of Streptococcus mutans biofilm.
AUTHOR: Kang M-S; Chung J; Kim S-M; Yang K-H; Oh J-S
CORPORATE SOURCE: Department of Microbiology and Immunology, School of Medicine, Chonnam National University, Gwangju, Korea.
SOURCE: Caries research, (2006) Vol. 40, No. 5, pp. 418-25.
Journal code: 0103374. ISSN: 0008-6568.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: (CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(CLINICAL TRIAL)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 200610
ENTRY DATE: Entered STN: 2 Sep 2006
Last Updated on STN: 1 Nov 2006
Entered Medline: 31 Oct 2006
AB The objective of this study was to isolate and identify lactic acid bacteria able to inhibit the in vitro formation of Streptococcus mutans biofilm as well as the in vivo formation of oral biofilm. Two strains, CMS1 and CMS3, exhibiting profound inhibitory effects on the formation of

S. mutans biofilm and the proliferation of S. mutans, were isolated from children's saliva and identified as Weissella cibaria by 16S rDNA sequencing. The water-soluble polymers produced from sucrose by the W. cibaria isolates also inhibited the formation of S. mutans biofilm. According to the results of thin-layer chromatographic analysis, the hydrolysates of water-soluble polymers produced by the isolates were identical to those of dextran, forming mostly alpha-(1-6) glucose linkages. In the clinical study, the subjects mouthrinsed with a solution containing W. cibaria CMS1 evidenced plaque index reduction of approximately 20.7% ($p < 0.001$). These results indicate that the W. cibaria isolates possess the ability to inhibit biofilm formation, both in vitro and in vivo.

L9 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:678241 CAPLUS
DOCUMENT NUMBER: 145:130845
TITLE: Therapeutic delivery system comprising a high molecular weight PEG-like compound
INVENTOR(S): Alverdy, John C.; Chang, Eugene B.; Petrof, Elaine O.
PATENT ASSIGNEE(S): University of Chicago, USA
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006073430	A2	20060713	WO 2005-US13465	20050420
WO 2006073430	A9	20061012		
WO 2006073430	A3	20061207		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005323502	A1	20060713	AU 2005-323502	20050420
CA 2563511	A1	20060713	CA 2005-2563511	20050420
EP 1744767	A2	20070124	EP 2005-856625	20050420
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CN 1964725	A	20070516	CN 2005-80018362	20050420

PRIORITY APPLN. INFO.:

US 2004-564031P	P	20040420
WO 2005-US13465	W	20050420

AB The present invention provides a system for delivering a wide range of chemical and biol. therapeutics, including protein therapeutics, via transepithelial routes. The system comprises a high mol. weight polyethylene glycol-like (HMW PEG-like) compound for use with a therapeutic compound Optionally, the system comprises a composition containing one or more HMW PEG-like compds. and one or more therapeutics, supplemented with a protective polymer such as dextran and/or essential pathogen nutrients such as L-glutamine. Administered alone, the HMW PEG-like compds. also provide therapeutic benefits. Also provided are methods for preventing or treating epithelial diseases, disorders, or conditions, such as an epithelium at risk of developing gut-derived sepsis attributable to an intestinal pathogen, as well as methods for monitoring the administration of HMW PEG-like compds. Thus, HMW PEG reduced the mortality rate attributable to gut-derived sepsis in mice subjected to surgical intervention in the form of a partial hepatectomy. It is expected that HMW PEG therapy will be effective in methods of preventing death or serious illness associated with sepsis when implemented following the physiol. stress (e.g., during postoperative care). Further, HMW PEG therapy may be used prior to physiol. stressing (e.g., preoperative care), under circumstances where introduction of the stress is predictable, to lower the risk of serious illness or death.

L9 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:413083 CAPLUS
DOCUMENT NUMBER: 140:402348
TITLE: Preparation of crosslinked enzyme particles using a polyaldehyde prepared from a polysaccharide as the water-soluble crosslinking agent
INVENTOR(S): Mateo, Cesar; Van Langen, Lukas Michaeel; Van Rantwijk, Frederik
PATENT ASSIGNEE(S): Technische Universiteit Delft, Neth.
SOURCE: PCT Int. Appl., 8 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004042053	A2	20040521	WO 2003-NL784	20031107
WO 2004042053	A3	20040701		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
NL 1021879	C2	20040511	NL 2002-1021879	20021108
CA 2505402	A1	20040521	CA 2003-2505402	20031107
AU 2003279626	A1	20040607	AU 2003-279626	20031107
EP 1563065	A2	20050817	EP 2003-772964	20031107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006505269	T	20060216	JP 2004-549725	20031107
US 2005272138	A1	20051208	US 2005-125592	20050509

PRIORITY APPLN. INFO.:
NL 2002-1021879 A 20021108
WO 2003-NL784 W 20031107

AB The invention relates to a method of preparing crosslinked enzyme particles using a crosslinking agent. According to the invention, the enzyme particles are formed and subsequently crosslinked using a crosslinking agent having at least n reactive groups where N ≥ 3 and a mol. weight of > 2,000 Da. A polyaldehyde appeared to be cost-effective and efficient crosslinking agent. According to a preferred embodiment a polysaccharide is subjected to a chemical treatment with periodate or an enzymic treatment with galactose oxidase in the presence of mol. oxygen to yield the polyaldehyde crosslinking agent. The polysaccharide is chosen from the group consisting of starch, glycogen and dextran. The crosslinked enzyme particles are treated with a reducing agent, such as sodium borohydride or sodium cyanoborohydride. The method according to the invention allows for obtaining enzyme particles having a higher enzyme activity than enzyme particles crosslinked according to the state of the art. Exemplary crosslinking of nitrilase from Pseudomonas fluorescens and alc. dehydrogenase from Lactobacillus brevis using polyaldehyde dextran as the crosslinking agent is described.

L9 ANSWER 3 OF 5 MEDLINE on STN
ACCESSION NUMBER: 2006578588 MEDLINE
DOCUMENT NUMBER: PubMed ID: 17008159
TITLE: Emerging fermentation technologies: development of novel sourdoughs.
AUTHOR: Lacaze G; Wick M; Cappelle S

CORPORATE SOURCE: Puratos Group, BU Bioflavors, Industrialaan, 25, 1702 Groot-bijgaarden, Belgium.
SOURCE: Food microbiology, (2007 Apr) Vol. 24, No. 2, pp. 155-60. Ref: 16
Journal code: 8601127. ISSN: 0740-0020.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200702
ENTRY DATE: Entered STN: 30 Sep 2006
Last Updated on STN: 21 Feb 2007
Entered Medline: 20 Feb 2007

AB The increasing knowledge of sourdough fermentation generates new opportunities for its use in the bakery field. New fermentation technologies emerged through in depth sourdough research. Dextrans are extracellular bacterial polysaccharides produced mainly by lactic acid bacteria (LAB). These bacteria convert sucrose thanks to an inducible enzyme called dextransucrase into dextran and fructose. The structure of dextran depends on the producing micro-organism and on culture conditions. Depending on its structure, dextran has specific properties which lead to several industrial applications in different domains. The use of dextran is not widely spread in the bakery field even if its impact on bread volume and texture was shown. A new process has been developed to obtain a sourdough rich in dextran using a specific LAB strain able to produce a sufficient amount of HMW dextran assuring a significant impact on bread volume. The sourdough obtained permits to improve freshness, crumb structure, mouthfeel and softness of all kinds of baked good from wheat rich dough products to rye sourdough breads. From fundamental research on dextran technology, a new fermentation process has been developed to produce an innovative functional ingredient for bakery industry.

L9 ANSWER 4 OF 5 MEDLINE on STN
ACCESSION NUMBER: 2001216777 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11247894
TITLE: Modulation of colonic barrier function by the composition of the commensal flora in the rat.
AUTHOR: Garcia-Lafuente A; Antolin M; Guarner F; Crespo E; Malagelada J R
CORPORATE SOURCE: Digestive System Research Unit, Hospital General Universitari Vall d'Hebron, Barcelona 08035, Spain.
SOURCE: Gut, (2001 Apr) Vol. 48, No. 4, pp. 503-7.
Journal code: 2985108R. ISSN: 0017-5749.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200104
ENTRY DATE: Entered STN: 25 Apr 2001
Last Updated on STN: 25 Jun 2002
Entered Medline: 19 Apr 2001

AB BACKGROUND AND AIMS: Altered intestinal permeability is a key pathogenetic factor of idiopathic bowel inflammation. We investigated in the rat if changes in the composition of the bowel flora can alter colonic permeability. METHODS: A colonic segment was surgically excluded from faecal transit and brought out as a loop to the abdominal wall through two colostomies. The loop was used for colonisation with specific bacterial strains after eradication of the native flora with antibiotics. Lumen to blood clearance of dextran (molecular weight 70 000) and mannitol (molecular weight 182) was measured in rats recolonised with a single bacterial strain from rat colonic origin,

and in control rats whose colonic loop was kept free of bacteria by antibiotics. Actual colonisation was confirmed by culture of segment effluents. RESULTS: Colonisation with Escherichia coli, Klebsiella pneumoniae, and Streptococcus viridans significantly increased lumen to blood clearance of mannitol. Colonisation with Lactobacillus brevis had the opposite effect and reduced permeability to mannitol. Bacteroides fragilis did not induce significant changes. Permeability to dextran was not altered by any of the strains tested. CONCLUSIONS: Certain commensal bacteria can modify colonic wall permeability to luminal substances.

L9 ANSWER 5 OF 5 MEDLINE on STN

ACCESSION NUMBER:	72189121 MEDLINE
DOCUMENT NUMBER:	PubMed ID: 4623864
TITLE:	Folate antagonists covalently linked to carbohydrates: synthesis, properties, and use in the purification of dihydrofolate reductases.
AUTHOR:	Whiteley J M; Jackson R C; Mell G P; Drais J H; Huennekens F M
SOURCE:	Archives of biochemistry and biophysics, (1972 May) Vol. 150, No. 1, pp. 15-22. Journal code: 0372430. ISSN: 0003-9861.
PUB. COUNTRY:	United States
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:	English
FILE SEGMENT:	Priority Journals
ENTRY MONTH:	197207
ENTRY DATE:	Entered STN: 10 Mar 1990 Last Updated on STN: 10 Mar 1990 Entered Medline: 27 Jul 1972

L13 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:394613 CAPLUS
DOCUMENT NUMBER: 147:98343
TITLE: Mannitol as a sensitive indicator of sugarcane deterioration and bacterial contamination in fuel alcohol production
AUTHOR(S): Eggleston, Gillian; Basso, Luiz Carlos; de Amorim, Henrique Vianna; de Lima Paulillo, Silene Cristina; Basso, Thiago Olitta
CORPORATE SOURCE: USDA-ARS-SRRC, New Orleans, LA, 70124, USA
SOURCE: Zuckerindustrie (Berlin, Germany) (2007), 132(1), 33-39
CODEN: ZUCKDI; ISSN: 0344-8657
PUBLISHER: Verlag Dr. Albert Bartens
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Mannitol, formed mainly by Leuconostoc mesenteroides bacteria, is a very sensitive indicator of sugarcane deterioration that can predict processing problems. A rapid (4 to 7 min) enzymic method has been developed to measure mannitol in juice pressed from consignments of sugarcane delivered to the factory. This method can be easily performed using existing equipment in sugarcane factories, with mannitol being measured spectrophotometrically using mannitol dehydrogenase (MDH) as the enzyme catalyst. The stability of the reagents, limited cane juice preparation, linearity, accuracy, and precision are described. The method is highly specific for mannitol and was not affected by the presence of sucrose, glucose, fructose, or dextran. The current cost is only .apprx.60 U.S. cents per anal. Mannitol has also been proved to be an advantageous indicator of bacterial contamination. Compared to other indicators, mannitol is not produced by yeast cells but only by some contaminating bacteria (mostly Lactobacillus strains) during fermentation Its presence can account for unexpected yield drops, and it can be measured easily. A strong correlation existed between mannitol formation and bacteria counts in sugarcane juice and molasses fermns: with induced mannitol producing bacterial contaminations.
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1169492 CAPLUS
DOCUMENT NUMBER: 144:329819
TITLE: Dextransucrase production by Leuconostoc mesenteroides
AUTHOR(S): Purama, Ravi Kiran; Goyal, Arun
CORPORATE SOURCE: Department of Biotechnology, Indian Institute of Technology Guwahati, Assam, 781 039, India
SOURCE: Indian Journal of Microbiology (2005), 45(2), 89-101
CODEN: IJMBAC; ISSN: 0046-8991
PUBLISHER: Association of Microbiologists of India
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. Microbes produce an array of exopolysaccharides which form a biofilm around the cells facilitating attachment of the cells to surface, colonization and providing protection against unfavorable conditions. Xanthan, alginate, pullulan, dextran, alternan, levan and inulan are some of the examples. Dextran, alternan, levan and inulan are produced by a group of bacteria belonging to Lactobacillus family. These compds. are derived from sucrose derivs. like glucose and fructose, where glucose gets polymerized to dextran while fructose is used as energy source by the exocellular or cell membrane bound enzymes. The gram-pos. Leuconostoc mesenteroides NRRL B-512F, which synthesizes the extracellular homopolysaccharide dextran, is an extensively used organism for the

industrial production of dextransucrase. Dextran gained importance owing to its applications in the pharmaceutical, food, photo film manufacturing and fine chemical industries. The maintenance and production media composition and culture conditions have been optimized for the large scale production of dextransucrase. Low cost carbon and nitrogen sources like sugar-beet molasses, corn steep liquor and wheat bran extract have been successfully employed for large-scale preparation of dextransucrase by fermentation process. Mutants were developed and fermentation techniques like batch, semi-continuous fermentation by free and immobilized cells were tried to economize com. production of dextransucrase. Present communication reviews the available information on cultural conditions and nutritional requirements for the production of dextransucrase by Leuconostoc sp.

REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1034693 CAPLUS
DOCUMENT NUMBER: 144:107071
TITLE: Development of dairy-based functional foods containing probiotics and prebiotics
AUTHOR(S): Desmond, C.; Corcoran, B. M.; Coakley, M.; Fitzgerald, G. F.; Ross, R. P.; Stanton, C.
CORPORATE SOURCE: Moorepark Food Research Centre, Teagasc, Cork, Ire.
SOURCE: Australian Journal of Dairy Technology (2005), 60(2), 121-126
CODEN: AJDTAZ; ISSN: 0004-9433
PUBLISHER: Dairy Industry Association of Australia, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Reconstituted skim milk (RSM, 10% w/v) was supplemented with one of 5 polysaccharides (dextran, inulin, polydextrose, raffinose and trehalose, each at 5% w/v) and mixed with the cell concentrate of exponential or stationary phase cultures of Lactobacillus paracasei NFBC338 before freeze drying. Following freeze drying of the stationary phase cultures, the highest viability was obtained in RSM alone (1.29 + 1010 CFU/g), while during powder storage a beneficial effect on culture viability was obtained in powders containing dextran, where an 11-fold improved survival at 37°C compared with RSM was attained. The viability of freeze dried exponentially growing cells was improved 4-fold when dried in media containing inulin compared to RSM alone, while stability during storage was improved up to 100-fold by the polysaccharides in the order inulin > polydextrose > RSM. The presence of dextran led to some protection of viability of L. paracasei NFBC338 under acidic conditions (pH 2.5), where the rate of viability decline (D value) of the dried culture was 26 min compared with 19 min in RSM in a simulated gastric environment. The usefulness of the prebiotic gum acacia for improving bifidobacterial survival during spray drying and powder storage is also reported, with a view to developing novel synbiotic ingredients.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:975115 CAPLUS
DOCUMENT NUMBER: 143:58840
TITLE: Effects of food polysaccharides and seaweed calcium on the physicochemical properties of prickly pear extract fermented by Lactobacillus rhamnosus LS
AUTHOR(S): Son, Min-Jeong; Kwon, Oh-Sik; Lee, Sam-Pin
CORPORATE SOURCE: Department of Food Science and Technology, Keimyung University, Taegu, 704-701, S. Korea

SOURCE: Journal of Food Science and Nutrition (2004), 9(3), 206-212
CODEN: JFSNFW; ISSN: 1226-332X
PUBLISHER: Korean Society of Food Science and Nutrition
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Prickly pear extract (PPE) was fermented by Lactobacillus rhamnosus LS at 30°C for 2 days. To improve the physicochem. properties of fermented PPE, it was fortified with food polysaccharides (0.2%) or seaweed calcium before lactic acid fermentation The viable cell counts, flow behavior, titratable acidity and color stability of fermented PPE were evaluated during 4 wk of cold storage. Addition of xanthan gum or glucomannan increased the apparent viscosity and acid production, viable cell counts and red color of PPE were also well maintained during the cold storage. However, fermenting PPE with gellan gum resulted in a decrease in relative absorbance, indicating lower color stability. In particular, PPE fortified with carrageenan or alginic acid showed reduced acid production and lower viable cell counts. Addition of seaweed calcium at a 0.1% level had pos. effects on color stability, and helped maintain viable cell counts of 4.1 + 109 CFU/mL. This study demonstrated that xanthan gum could be used as a good thickening agent and stabilizer for retaining viable cell counts and red color during the cold storage in PPE fermented by lactic acid bacteria.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:229708 CAPLUS
DOCUMENT NUMBER: 141:151739
TITLE: Detection of Leuconostoc strains at a meat processing plant using polymerase chain reaction
AUTHOR(S): Goto, Seitaro; Takahashi, Hajime; Kawasaki, Susumu; Kimura, Bon; Fujii, Tateo; Nakatsuji, Miki; Watanabe, Itaru
CORPORATE SOURCE: Prod. Tech. Res. Cent., Nippon Meat Packers Inc., Shizuoka, 421-0305, Japan
SOURCE: Shokuhin Eiseigaku Zasshi (2004), 45(1), 25-28
CODEN: SKEZAP; ISSN: 0015-6426
PUBLISHER: Nippon Shokuhin Eisei Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To simplify the labor-intensive conventional routine testing of samples to detect Leuconostoc at a meat processing plant, we developed polymerase chain reaction (PCR) primers specific for Leuconostoc from 16S rRNA gene sequences. These primers did not detect other common lactic acid bacteria such a Lactobacillus plantarum, Lact. sake, Lact. fermentum, Lact. acidophilus and Weissella viridescens. PCR with this primer detected all Leuconostoc species tested (Leu. mesenteroides subsp. mesenteroides, Leu. pseudomesenteroides, Leu. carnosum, Leu. lactic, Leu. citreum, Leu. amelibiosum, Leu. gelidum), except for Leu. fallax, and no other lactic acid bacteria on agarose gel electrophoresis. The method could identify areas contaminated with Leuconostoc in a large-scale industrial meat processing plant. Of 69 samples analyzed, 34 were pos. for Leuconostoc according to the conventional culture method (isolation of LAB producing dextran) and PCR, whereas 29 were neg. according to both. Six samples were culture-neg. but pos. by PCR. No false neg. results were generated by PCR. The method is rapid and simple, is useful for routinely monitoring areas contaminated with Leuconostoc in meat processing plants, and could help to prevent the spoilage of meat products.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:918460 CAPLUS
DOCUMENT NUMBER: 139:395140
TITLE: γ-Aminobutyric acid (GABA)-rich materials with sweet floral odor, their fermentative manufacture, and their use for tea, fragrances, and foods
INVENTOR(S): Kato, Chinatsu; Yoshibe, Fumihisa; Okanoya, Kazunori; Sonoda, Hisayasu
PATENT ASSIGNEE(S): Itoen Ltd., Japan; Taiyo Corporation
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003333990	A	20031125	JP 2002-143227	20020517
JP 3605601	B2	20041222		
PRIORITY APPLN. INFO.:			JP 2002-143227	20020517

AB Title materials are manufactured by removing polyphenols from tea extract and cultivation of lactic acid bacteria in the polyphenol-removed extract Thus, tea extract was mixed with poly(vinylpyrrolidone) to adsorb polyphenols, inoculated with Lactobacillus brevis TY1485, fermented at 30° for 64 h, centrifuged, and powdered to manufacture GABA-rich power.

L13 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:511049 CAPLUS
DOCUMENT NUMBER: 139:84363
TITLE: Malleable protein matrix and uses thereof
INVENTOR(S): Simard, Eric; Pilote, Dominique; Dupont, Claude; Lajoie, Nathalie; Paquet, Marcel; Lemieux, Pierre; Goyette, Philippe
PATENT ASSIGNEE(S): Technologies Biolactis Inc., Can.
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003053158	A2	20030703	WO 2002-CA1988	20021220
WO 2003053158	A3	20030828		
WO 2003053158	A9	20040408		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2470776	A1	20030703	CA 2002-2470776	20021220
AU 2002351606	A1	20030709	AU 2002-351606	20021220
EP 1458247	A2	20040922	EP 2002-787279	20021220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005513076	T	20050512	JP 2003-553926	20021220

US 2006057131 A1 20060316 US 2005-499313 20050224
PRIORITY APPLN. INFO.: US 2001-341232P P 20011220
WO 2002-CA1988 W 20021220

AB The present invention relates to a malleable protein matrix (MPM) which is the reaction product of the agglomeration of proteins after a fermentation process, exhibits biol. activities and is suitable for the incorporation (or encapsulation) of various hydrophilic or lipophilic substances. The present invention also relates to the process for the preparation of the malleable protein matrix and its uses in food, drug, medical and cosmetic products.

L13 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:566663 CAPLUS
DOCUMENT NUMBER: 135:163319
TITLE: Peptide nucleic acid probes targeted to rRNA sequence for universal detection of bacteria and eucarya
INVENTOR(S): Hyldig-Nielsen, Jens J.; O'Keefe, Heather P.
PATENT ASSIGNEE(S): Boston Probes Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 30 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001010910	A1	20010802	US 1999-368089	19990803
US 6280946	B2	20010828		
US 6656687	B1	20031202	US 2001-822763	20010330
US 7108980	B1	20060919	US 2003-684971	20031014

PRIORITY APPLN. INFO.: US 1998-95628P P 19980807
US 1999-368089 A1 19990803
US 2001-822763 A3 20010330

AB This invention is directed to peptide nucleic acid (PNA) probes, probe sets, methods and kits useful for the universal detection, identification and/or enumeration of bacteria and/or eucarya in a sample. The PNA probes targeted to rRNA sequence, labeled with chromophores, fluorophores, spin labels, radioisotopes, enzymes, haptens, and chemiluminescent compds., and may be immobilized on a support, are suitable for in situ hybridization. Unique PNA probe constructs of this invention also include probes comprising two or more different types of labels such as the use of a hapten/fluorophore (e.g. fluorescein) in combination with an enzyme (e.g. soybean peroxidase). Detection, identification and or quantitation is made possible by correlating the hybridization, under suitable hybridization conditions, of the probing nucleobase sequence of a PNA probe to the target sequence of bacteria or eucarya in the sample to thereby determine the presence, absence or number of bacteria and/or eucarya in the sample. This correlation is made possible by direct or indirect detection of the probe/target sequence hybrid. This invention is also directed to a multiplex PNA in-situ hybridization (PNA-ISH) assay and particularly a PNA-FISH assay. The PNA probes, probe sets, methods and kits of this invention are particularly useful for the detection, identification and/or enumeration of bacteria and eucarya (e.g. pathogens) in food, beverages, water, pharmaceutical products, personal care products, dairy products or environmental samples.

L13 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:878040 CAPLUS
DOCUMENT NUMBER: 123:284098
TITLE: Microbiological and chemical composition of "sugar" Kefir grains

AUTHOR(S): Galli, A.; Fiori, E.; Franzetti, L.; Pagani, M. A.; Ottogalli, G.
CORPORATE SOURCE: Dipartimento di Scienze e Tecnologie Alimentari e Microbiologiche, Univ. delgi Studi di Milano, Milan, Italy
SOURCE: Annali di Microbiologia ed Enzimologia (1995), 45(Pt. 1), 85-95
CODEN: AMEZAB; ISSN: 0003-4649
PUBLISHER: Universita degli Studi di Milano
DOCUMENT TYPE: Journal
LANGUAGE: Italian

AB Some different Kefir grains used for the preparation of the acid-alc. beverage called sugar kefir have been examined on the structural, chemical and microbiol. point of view. They were irregular in shape and had a diameter going from a few mm to several cm; white hyaline color, translucent, unelastic and rather fragile; and 95-97% are composed of polysaccharides (dextrans) with chains of glucose only. Inside the matrix the lactic acid bacteria L. casei subsp. casei e L. casei subsp. pseudoplantarum, Leuconostoc spp. and Pediococcus spp.) were found but not the yeasts (S. cerevisiae, and Hanseniaspora spp.) which are located in the interstitial liquid; therefore they are detectable by cultural assay and optical microscopy, but cannot be observed by scanning electronic microscopy. Lactic acid bacteria, L. casei subsp. casei and L. casei subsp. pseudoplantarum, are considered to be responsible for the polymers production

L13 ANSWER 10 OF 10 MEDLINE on STN
ACCESSION NUMBER: 96097161 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7476564
TITLE: Biodiversity of lactic acid bacteria from food-related ecosystems.
AUTHOR: Damelin L H; Dykes G A; von Holy A
CORPORATE SOURCE: Department of Microbiology, University of the Witwatersrand, Johannesburg, South Africa.
SOURCE: Microbios, (1995) Vol. 83, No. 334, pp. 13-22.
Journal code: 0207257. ISSN: 0026-2633.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199512
ENTRY DATE: Entered STN: 24 Jan 1996
Last Updated on STN: 24 Jan 1996
Entered Medline: 21 Dec 1995

AB The diversity of lactic acid bacteria within a variety of food-related ecosystems was assessed and the strain as well as environment specific characteristics were investigated. The strains (108 in toto) were isolated from plant material, traditional fermented foods, dried marine algae, sea food, fungi as well as spoiled foods and beverages, and all were characterized to genus level. Lactobacillus strains dominated all ecosystems and contributed to 65% of the isolates while a further 13% consisted of Lactococcus strains, 12% of Leuconostoc strains, 5% of Pediococcus strains, and 5% of unidentified strains. Plant material was the most diverse ecosystem containing representatives from each of the genera as well as the majority of dextran and tyramine producers. Those strains able to grow at 45 degrees C as well as acid tolerant strains were predominantly isolated from traditional fermented beverages while halotolerant strains occurred mainly in sea food. Two bacteriocin producers but no histamine producers were isolated.

L14 ANSWER 27 OF 37 MEDLINE on STN
ACCESSION NUMBER: 2006083023 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16469163
TITLE: Oral immunoadjuvant activity of Lactobacillus casei subsp. casei in dextran-fed layer chickens.
AUTHOR: Ogawa Tomohiko; Asai Yasuyuki; Sakamoto Hiromi; Yasuda Kenji
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, 1851-1 Hozumi, Mizuho, Gifu 501-0296, Japan.. tomo527@dent.asahi-u.ac.jp
SOURCE: The British journal of nutrition, (2006 Feb) Vol. 95, No. 2, pp. 430-4.
Journal code: 0372547. ISSN: 0007-1145.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200603
ENTRY DATE: Entered STN: 11 Feb 2006
Last Updated on STN: 15 Mar 2006
Entered Medline: 14 Mar 2006

AB We recently reported that synbiotic Lactobacillus casei subsp. casei together with specific substrate dextran elicited an enhancement in humoral immune response against bovine serum albumin (BSA) as a model antigen in BALB/c mice. The present study was designed to evaluate the oral immunoadjuvant effects of the synbiotic in layer chickens. Using a PCR assay, L. casei subsp. casei was detected specifically in the intestinal chyme of chickens (10 d of age, Julia strain) fed ad libitum on a diet supplemented with 75 mg dextran/kg (dextran-supplemented diet, DSD) and administered orally with 10(7) colony-forming units (CFU) L. casei subsp. casei in 0.1 ml PBS with the aid of an intubation needle at 1, 2 and 3 d of age. Furthermore, oral administration of 10(7) CFU L. casei subsp. casei at 1-3 d of age significantly enhanced the production of anti-BSA antibody in DSD-fed chickens (60 d of age) administered orally with 1 mg BSA at 32 and 33 d of age and subcutaneously with 5 microg BSA at 33 d of age. In addition, among bacterial numbers tested, 10(6) CFU L. casei subsp. casei together with dextran induced an effective increase in humoral immune response to mixed inactivated vaccines against Newcastle disease and avian infectious bronchitis, and the treatment may be advantageous in protecting against these infectious diseases in chickens in actual application. These results suggest that dietary supplementation of L. casei subsp. casei with dextran leads to immunomodulation of humoral immune responses.

L14 ANSWER 28 OF 37 MEDLINE on STN
ACCESSION NUMBER: 2001023460 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10895910
TITLE: Effects of various adjuvants on efficacy of a vaccine against Streptococcus bovis and Lactobacillus spp in cattle.
AUTHOR: Shu Q; Hillard M A; Bindon B M; Duan E; Xu Y; Bird S H; Rowe J B; Oddy V H; Gill H S
CORPORATE SOURCE: Department of Animal Science and the Cooperative Research Centre for Cattle and Beef Industry, University of New England, Armidale, NSW, Australia.
SOURCE: American journal of veterinary research, (2000 Jul) Vol. 61, No. 7, pp. 839-43.
Journal code: 0375011. ISSN: 0002-9645.
PUB. COUNTRY: United States
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 200011
ENTRY DATE: Entered STN: 22 Mar 2001
Last Updated on STN: 22 Mar 2001
Entered Medline: 3 Nov 2000

AB OBJECTIVE: To determine efficacy of vaccines incorporating QuilA, alum, dextran combined with mineral oil, or Freund adjuvant for immunization of feedlot cattle against Streptococcus bovis and Lactobacillus spp. ANIMALS: 24 steers housed under feedlot conditions. PROCEDURE: Steers were randomly assigned to 4 experimental groups and a control group. Animals in experimental groups were inoculated on days 0 and 26 with vaccines containing Freund adjuvant (FCA), QuilA, dextran combined with mineral oil (Dex), or alum as adjuvant. Serum anti-S bovis and anti-Lactobacillus IgG concentrations were measured, along with fecal pH, ruminal fluid pH, and number of S bovis and Lactobacillus spp in ruminal fluid. RESULTS: Throughout the study, serum anti-S bovis and anti-Lactobacillus IgG concentrations for animals in the Dex, QuilA, and alum groups were similar to or significantly higher than concentrations for animals in the FCA group. Serum anti-S bovis and anti-Lactobacillus IgG concentrations were significantly increased on days 26 through 75 in all 4 experimental groups, and there was a linear relationship between anti-S bovis and anti-Lactobacillus IgG concentrations. For animals in the QuilA and Dex groups, mean pH of feces throughout the period of experiment were significantly higher and numbers of S bovis and Lactobacillus spp in ruminal fluid on day 47 were significantly lower than values for control cattle. CONCLUSIONS AND CLINICAL RELEVANCE: Results suggest that immunization of feedlot steers against S bovis and Lactobacillus spp with vaccines incorporating Freund adjuvant, QuilA, dextran, or alum as an adjuvant effectively induced high, long-lasting serum anti-S bovis and anti-Lactobacillus IgG concentrations. Of the adjuvants tested, dextran may be the most effective.

L14 ANSWER 29 OF 37 MEDLINE on STN
ACCESSION NUMBER: 2000343092 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10884713
TITLE: In vitro fermentability of dextran, oligodextran and maltodextrin by human gut bacteria.
AUTHOR: Olano-Martin E; Mountzouris K C; Gibson G R; Rastall R A
CORPORATE SOURCE: Department of Food Science and Technology, University of Reading, Whiteknights, UK.
SOURCE: The British journal of nutrition, (2000 Mar) Vol. 83, No. 3, pp. 247-55.
Journal code: 0372547. ISSN: 0007-1145.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200007
ENTRY DATE: Entered STN: 28 Jul 2000
Last Updated on STN: 28 Jul 2000
Entered Medline: 17 Jul 2000

AB Anaerobic batch culture fermenters were used for a preliminary screening of the in vitro utilization by human gut microflora of dextran and novel oligodextrans (I, II and III) produced in the University of Reading (UK). Glucose and fructooligosaccharides (FOS) were used as reference carbohydrates. As expected, FOS acted as a good prebiotic in that it selectively increased numbers of bifidobacteria in the early stages of the fermentation. Dextran and oligodextrans each resulted in an enrichment of bifidobacteria in the batch cultures, with high levels of persistence up to 48 h. They also produced elevated levels of butyrate ranging from 5 to 14.85 mmol/l. To more effectively simulate conditions that prevail in different regions of the large intestine, a three-stage continuous culture cascade system was used to study further the fermentation of dextran, a

low-molecular-mass oligodextran (IV) and maltodextrin. Oligodextran IV was shown to be the best substrate for bifidobacteria and lactobacilli with steady-state populations of bifidobacteria and lactobacilli being higher in all three vessels of the gut model than the respective populations resulting from dextran and maltodextrin. A maximum difference of 1.9 log was observed in vessel 1 for both bifidobacteria and lactobacilli in the case of dextran fermentation, with 1.4 log and 0.8 log in vessel 3 were the maximum differences for bifidobacteria and lactobacilli when maltodextrin was used as the carbohydrate source. Moreover, dextran and oligodextran appeared to stimulate butyrate production, with a maximum production up to 25.39 mmol/l in vessel 3 when fermenting dextran, followed by 21.70 mmol/l in the case of oligodextran IV and only 12.64 mmol/l in the case of maltodextrin.

L14 ANSWER 30 OF 37 MEDLINE on STN
ACCESSION NUMBER: 88257390 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2454943
TITLE: Association of viridans group streptococci from pregnant women with bacterial vaginosis and upper genital tract infection.
AUTHOR: Rabe L K; Winterscheid K K; Hillier S L
CORPORATE SOURCE: Department of Obstetrics and Gynecology, University of Washington, Seattle 98195.
CONTRACT NUMBER: AI12192 (NIAID)
HD-3-2832 (NICHD)
SOURCE: Journal of clinical microbiology, (1988 Jun) Vol. 26, No. 6, pp. 1156-60.
Journal code: 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198808
ENTRY DATE: Entered STN: 8 Mar 1990
Last Updated on STN: 3 Feb 1997
Entered Medline: 2 Aug 1988

AB The prevalence and role of viridans group streptococci in the female genital tract have not been well described. In this study of 482 pregnant women, 147 (30%) were culture positive for viridans group streptococci. Of 392 women with predominant Lactobacillus morphotypes by Gram stain (normal), 110 (28%) were colonized with viridans group streptococci, compared with 37 (41%) of 90 women with bacterial vaginosis (BV) (P = 0.02). To determine whether any species were associated with BV, 177 consecutively isolated viridans group streptococci from the vagina were identified to the species level by using the Facklam scheme. The most frequently isolated species from the vagina was Streptococcus intermedius (13%), followed by Streptococcus acidominimus (6%), Streptococcus constellatus (5%), Streptococcus sanguis II (4%), Streptococcus mitis (2%), Streptococcus salivarius (2%), Streptococcus morbillorum (2%), Streptococcus sanguis I (1%), Streptococcus mutans (0.2%), and Streptococcus uberis (0.2%) with an average of 1.2 species per woman. The distribution of the species among women with BV compared with normal women was not significantly different, with the exception of two species which were associated with BV: S. acidominimus (18% versus 3%, P less than 0.001) and S. morbillorum (6% versus 0.7%, P = 0.005). Amniotic fluid and placenta cultures yielded 54 isolates: S. sanguis II (13 isolates), S. acidominimus (9 isolates), S. intermedius (10 isolates), S. constellatus (3 isolates), S. mitis (4 isolates), S. sanguis I (4 isolates), S. morbillorum (5 isolates), S. mutans (2 isolates), S. uberis (1 isolate), mannitol-positive S. intermedius (1 isolate), and 2 isolates which were not classified. The distribution of species isolated from the upper genital tract was not a reflection of the distribution in the lower genital tract. Dextran-producing species of viridans group streptococci

may have a greater pathogenic potential in the placenta than the non-dextran-producing species.

L14 ANSWER 31 OF 37 MEDLINE on STN
ACCESSION NUMBER: 84027738 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6194937
TITLE: Comparative study of the efficiency of some additives in protecting lactic acid bacteria against freeze-drying.
AUTHOR: Font de Valdez G; Savoy de Giori G; Pesce de Ruiz Holgado A; Oliver G
SOURCE: Cryobiology, (1983 Oct) Vol. 20, No. 5, pp. 560-6.
Journal code: 0006252. ISSN: 0011-2240.
PUB. COUNTRY: United States
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198312
ENTRY DATE: Entered STN: 19 Mar 1990
Last Updated on STN: 3 Mar 2000
Entered Medline: 20 Dec 1983
AB Cultures of 14 lactic acid bacteria species were freeze-dried in 10 or 20% non-fat skim milk and in distilled water containing one of the following additives: bovine albumin, glycogen, dextran, polyethylene glycol (PEG) 1000, PEG 4000, PEG 6000, glycerol, beta-glycerophosphate, sodium glutamate, asparagine, or cysteine. Each of the potential protective agents tested exhibited marked variations in the protection afforded to different species, none of them was effective for the preservation of viability of thermophilic lactobacilli. However, glycerol provided effective protection for L. leichmannii ATCC 4797 (90% survival), while L. bulgaricus ATCC 11842 reached a viability of 78% with 0.04 M cysteine.

L14 ANSWER 32 OF 37 MEDLINE on STN
ACCESSION NUMBER: 76231161 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1065273
TITLE: Role of plaque in dental caries.
AUTHOR: Knox K W; Schamschula R G
SOURCE: Australian dental journal, (1976 Feb) Vol. 21, No. 1, pp. 48-53.
Journal code: 0370612. ISSN: 0045-0421.
PUB. COUNTRY: Australia
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 197609
ENTRY DATE: Entered STN: 13 Mar 1990
Last Updated on STN: 13 Mar 1990
Entered Medline: 2 Sep 1976

L14 ANSWER 33 OF 37 MEDLINE on STN
ACCESSION NUMBER: 73031544 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4507780
TITLE: Reaction of dextrans with antisera to teichoic acids.
AUTHOR: Knox K W; Wicken A J
SOURCE: Archives of oral biology, (1972 Oct) Vol. 17, No. 10, pp. 1491-4.
Journal code: 0116711. ISSN: 0003-9969.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals

ENTRY MONTH: 197301
ENTRY DATE: Entered STN: 10 Mar 1990
Last Updated on STN: 10 Mar 1990
Entered Medline: 5 Jan 1973

L14 ANSWER 34 OF 37 MEDLINE on STN
ACCESSION NUMBER: 71265066 MEDLINE
DOCUMENT NUMBER: PubMed ID: 5284300
TITLE: Contribution of plaque polysaccharides to growth of cariogenic microorganisms.
AUTHOR: Parker R B; Creamer H R
SOURCE: Archives of oral biology, (1971 Aug) Vol. 16, No. 8, pp. 855-62.
Journal code: 0116711. ISSN: 0003-9969.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 197110
ENTRY DATE: Entered STN: 1 Jan 1990
Last Updated on STN: 1 Jan 1990
Entered Medline: 14 Oct 1971

L14 ANSWER 35 OF 37 MEDLINE on STN
ACCESSION NUMBER: 69294348 MEDLINE
DOCUMENT NUMBER: PubMed ID: 5367451
TITLE: Structure of the cell wall peptidoglycan of Lactobacillus casei RO94.
AUTHOR: Hungerer K D; Fleck J; Tipper D J
SOURCE: Biochemistry, (1969 Sep) Vol. 8, No. 9, pp. 3567-77.
Journal code: 0370623. ISSN: 0006-2960.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 196911
ENTRY DATE: Entered STN: 1 Jan 1990
Last Updated on STN: 3 Feb 1997
Entered Medline: 3 Nov 1969

L14 ANSWER 36 OF 37 MEDLINE on STN
ACCESSION NUMBER: 69280200 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4979949
TITLE: Dextran production by a human oral strain of Lactobacillus casei.
AUTHOR: Hammond B F
SOURCE: Archives of oral biology, (1969 Aug) Vol. 14, No. 8, pp. 879-90.
Journal code: 0116711. ISSN: 0003-9969.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 196910
ENTRY DATE: Entered STN: 1 Jan 1990
Last Updated on STN: 1 Jan 1990
Entered Medline: 21 Oct 1969

L14 ANSWER 37 OF 37 MEDLINE on STN
ACCESSION NUMBER: 67122842 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4960207
TITLE: Synthesis of extracellular dextran by cariogenic bacteria and its presence in human dental plaque.
AUTHOR: Gibbons R J; Banghart S B

SOURCE: Archives of oral biology, (1967 Jan) Vol. 12, No. 1, pp. 11-23.
Journal code: 0116711. ISSN: 0003-9969.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 196705
ENTRY DATE: Entered STN: 1 Jan 1990
Last Updated on STN: 1 Jan 1990
Entered Medline: 13 May 1967

L14 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:116715 CAPLUS
DOCUMENT NUMBER: 120:116715
TITLE: Effect of excipients on stability of tablets of Lactobacterium bulgaricum
AUTHOR(S): Andonova, V.; Ateva, P.; Luna, M.
CORPORATE SOURCE: Bulg.
SOURCE: Trudove na Nauchnoizsledovatelskiya Khimikofarmatsevtichen Institut (1992), 18, 127-32
CODEN: TKZGAG; ISSN: 0371-8972
DOCUMENT TYPE: Journal
LANGUAGE: Bulgarian
AB Among various excipients, mannitol and sorbitol showed the best stabilizing properties for lyophilized Lactobacterium bulgaricum in tablets. Stearic acid ensures stability of bacteria at the optimal pH (4-4.5). Both Et cellulose and stearic acid hydrophobized granulation by moisture, which is important for bacterial survival.

L14 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:593901 CAPLUS
DOCUMENT NUMBER: 117:193901
TITLE: Mesophilic and thermophilic bacteria in a cane sugar refinery
AUTHOR(S): De Lucca, Anthony J., II; Kitchen, Richard A.; Clarke, Margaret A.; Goynes, Wilton R.
CORPORATE SOURCE: South. Reg. Res. Cent., USDA, New Orleans, LA, USA
SOURCE: Zuckerindustrie (Berlin, Germany) (1992), 117(4), 237-40
CODEN: ZUCKDI; ISSN: 0344-8657
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Sucrose balance measurements in a sugar refinery revealed large losses of final product. A microbiol. study showed unusual bacterial levels at several key locations of the colored liquor side of the refining process. These locations were divided into two groups. The first group consisted of locations in the refining stream where low d. syrups (sweetwaters) were present. The second group were locations associated with the decolorizing process in the bone char cisterns. Lactic acid was found in samples taken from the first group. Leuconostoc sp., which produced ≤0.4% lactic acid and 5.8% dextran in cultures, were found in these samples. Non-Leuconostoc isolates from these same areas produced .apprx.0.1% lactic acid in cultures. Lactic acid levels increased when the sugar solns. passed through the decolorizing cisterns. Thermophilic, sucrose-utilizing, bacteria were found at high levels in the rust scale that coated, and the adsorbent that filled, the cisterns. Isolates included members of the Bacillus, clostridium, and Lactobacillus genera. The Bacillus isolates were capable of growing at 70°. A wide range of mesophilic and obligate thermophile microorganisms could colonize and thrive in sugar refining processes thereby causing serious losses to the final product. This was probably the first report of the presence of the thermophile, B. acidocaldarius, in the rust scale found on the inside of decolorizing cisterns.

L14 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:507468 CAPLUS
DOCUMENT NUMBER: 109:107468
TITLE: Characterization of the polysaccharides from a Lactobacillus brevis and from sugary kefir grains
AUTHOR(S): Pidoux, M.; Brillouet, J. M.; Quemener, B.
CORPORATE SOURCE: Lab. Genie Aliment., ENITIAA, Nantes, 44072, Fr.

SOURCE: Biotechnology Letters (1988), 10(6), 415-20
CODEN: BILED3; ISSN: 0141-5492
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The gel-forming polysaccharide of the sugary kefir grains (11.5% of dry matter) or one taken from a Lactobacillus brevis culture were identified as dextrans with some 1)-Gp-(3 links in the main chain, with a ratio (branched/total units) of 0.19 and 0.14 resp., instead of 0.07 for the non-gelling polysaccharide.

L14 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:20315 CAPLUS
DOCUMENT NUMBER: 100:20315
TITLE: Comparative study of the efficiency of some additives in protecting lactic acid bacteria against freeze-drying
AUTHOR(S): Font de Valdez, Graciela; Savoy de Giori, Graciela; Pesce de Ruiz Holgado, Aida; Oliver, Guillermo
CORPORATE SOURCE: Fac. Bioquim. Quim. Farm., UNT, San Miguel de Tucuman, 4000, Argent.
SOURCE: Cryobiology (1983), 20(5), 560-6
CODEN: CRYBAS; ISSN: 0011-2240
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cultures of 14 lactic acid bacteria species were freeze-dried in 10 or 20% non-fat skim milk and in distilled water containing bovine albumin, glycogen, dextran, polyethylene glycol (PEG) 1000, PEG 4000, PEG 6000, glycerol, β-glycerophosphate, Na glutamate, asparagine, or cysteine. Each of the potential protective agents tested exhibited marked variations in the protection afforded to different species; none was effective for the preservation of viability of thermophilic lactobacilli. However, glycerol provided effective protection for L. leichmannii ATCC 4797 (90% survival), whereas L. bulgaricus ATCC 11842 reached a viability of 78% with 0.04M cysteine.

L14 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:467267 CAPLUS
DOCUMENT NUMBER: 99:67267
TITLE: Distribution of insoluble dextran-degrading bacteria in human dental plaques and the activity of enzyme obtained from an isolated strain
AUTHOR(S): Sakima, Morio
CORPORATE SOURCE: Dep. Oral Microbiol., Fukuoka Dent. Coll., Fukuoka, 814, Japan
SOURCE: Kyushu Shika Gakkai Zasshi (1983), 37(1), 89-100
CODEN: KSGZA3; ISSN: 0368-6833
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Distribution of insol. dextran-degrading bacteria in human dental plaque was examined in 120 adults age 20-22. Properties of an isolated strain (DC-16) and the activity of the enzyme from the strain were also examined Bacteria producing insol. dextran-degrading enzyme were detected in 35 of 120 samples, and the number of such bacteria was >1% of the total bacteria in 33 samples. In samples having higher caries activity, more bacteria producing this enzyme were detected. Of 26 isolated bacteria, 16 were gram-pos. cocci, 8 were gram-pos. bacilli, and 2 were gram-neg. bacilli. Eleven isolates were streptococci. The optimal pH of this enzyme from strain DC-16 was 6.0. The enzyme was inactivated by heating at 60° for 10 min. Strain DC-16 did not degrade soluble dextran under the same conditions. Strain DC-16 was identified as Lactobacillus brevis.

L14 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1971:506411 CAPLUS
DOCUMENT NUMBER: 75:106411
TITLE: Contribution of plaque polysaccharides to growth of cariogenic microorganisms
AUTHOR(S): Parker, R. B.; Creamer, H. R.
CORPORATE SOURCE: Dent. Sch., Univ. Oregon, Portland, OR, USA
SOURCE: Archives of Oral Biology (1971), 16(8), 855-62
CODEN: AOBIAR; ISSN: 0003-9969
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The possible role of microbial polysaccharides (levans, dextrans, and amylopectin) in the nutrition of pure cultures of oral bacteria was investigated. All polysaccharides tested were utilized to some degree by one or more of the individual oral species employed in the study. Certain polysaccharides, namely a levan produced by a non-cariogenic streptococci and amylopectin from Neisseria, were utilized more readily by streptococci and a lactobacillus than was sucrose. Data also suggest that the synthesis of polysaccharides by noncariogenic and even non-acid producing oral bacteria may serve as substrates for other species, and may play a role in the development and maintenance of dental plaque and in the production of dental decay.

L14 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:488655 CAPLUS
DOCUMENT NUMBER: 71:88655
TITLE: Dextran production by a human oral strain of Lactobacillus casei
AUTHOR(S): Hammond, Benjamin F.
CORPORATE SOURCE: Univ. of Pennsylvania, Philadelphia, PA, USA
SOURCE: Archives of Oral Biology (1969), 14(8), 879-90
CODEN: AOBIAR; ISSN: 0003-9969
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis of an adherent, dextranlike, extracellular polysaccharide has been demonstrated in cell-free exts., resting, and growing cells of a strain of L. casei (32-1 +) isolated from the human gingival crevice. Confirmation of the dextran nature of the material was obtained by controlled periodate oxidation and borohydride reduction, chromatographic anal. and serologic criteria. Glucose units were the sole components of the polysaccharide and were joined by α-1,6 or α-1,2 linkages. The synthesizing enzyme, dextransucrase, was constitutive and was produced in growing cells from glucose as well as sucrose, although sucrose is the preferred reaction ("donor") substrate. This dextran is distinct from the capsular heteropolysaccharide produced by some L. casei strains but is identical to the dextrans of several cariogenic streptococci when examined by techniques of immunodiffusion. Chemical and phys. confirmation of these serologic data were essential, however, since bands of identity were observed between these dextrans and several nondextran polysaccharides produced by diverse oral bacteria.

L14 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1967:73439 CAPLUS
DOCUMENT NUMBER: 66:73439
TITLE: Synthesis of extracellular dextran by cariogenic bacteria and its presence in human dental plaque
AUTHOR(S): Gibbons, Ronald J.; Banghart, S. B.
CORPORATE SOURCE: Harvard School Dental Med., Boston, MA, USA
SOURCE: Archives of Oral Biology (1967), 12(1), 11-24
CODEN: AOBIAR; ISSN: 0003-9969
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The extracellular polysaccharide synthesized by certain human and rodent cariogenic bacteria primarily from sucrose was a dextranlike

polymer. Maximum quantities of this polysaccharide were synthesized in a 10% sucrose broth, and were not markedly reduced by the presence of free glucose or fructose. The polysaccharides produced by rat, hamster, and human cariogenic streptococci and by a cariogenic strain of Lactobacillus acidophilus were immunologically similar. Samples of pooled human dental plaque contained a constituent, nearly 2% of its dry weight, which was immunologically similar to dextran. The synthesis of dextran by cariogenic, but not by noncariogenic, bacteria may enable these organisms to form the dental plaque required for the production of dental caries.

L14 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1962:418835 CAPLUS
DOCUMENT NUMBER: 57:18835
ORIGINAL REFERENCE NO.: 57:3864d-e
TITLE: Deoxyribonucleic acid uptake by resting bacterial cells and its inhibition by macromolecules
AUTHOR(S): Wacker, A.; Pfahl, D.; Laschet, L.
CORPORATE SOURCE: Univ. Frankfurt a.M., East Ger.
SOURCE: Naturwissenschaften (1962), 49, 190-1
CODEN: NATWAY; ISSN: 0028-1042
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Lactobacillus leichmannii grown on guanine deoxyriboside and in the resting state can take up from the medium deoxyribonucleic acid (I) and I modified by treating with heat, acid, alkali, and deoxyribonuclease. The uptake is temperature dependent and is suggestive of an enzymic process. Uptake is prevented by methylating or deaminating I. Dextran sulfate, heparin, and polyethylene sulfate competitively inhibit the uptake of I, but dextran has no effect.

L14 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1960:97873 CAPLUS
DOCUMENT NUMBER: 54:97873
ORIGINAL REFERENCE NO.: 54:18616e-f
TITLE: Action of bacterial dextranase on branched dextrans
AUTHOR(S): Bailey, R. W.; Hutson, D. H.; Weigel, H.
CORPORATE SOURCE: Univ. London
SOURCE: Nature (London, United Kingdom) (1960), 186, 553-4
CODEN: NATUAS; ISSN: 0028-0836
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB A dextranase from Lactobacillus bifidus has been used to hydrolyze several naturally occurring dextrans as an aid in establishing their structures. The enzyme was unable to hydrolyze a dextran that contained 36% of α-1,3 and α-1,4 links, and appears to be unable to hydrolyze branching links in dextrans.

L14 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:224198 CAPLUS
DOCUMENT NUMBER: 142:390615
TITLE: Oral immunoadjuvant activity of a new synbiotic Lactobacillus casei subsp casei in conjunction with dextran in BALB/c mice
AUTHOR(S): Ogawa, Tomohiko; Asai, Yasuyuki; Yasuda, Kenji; Sakamoto, Hiromi
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, Gifu, 501-0296, Japan
SOURCE: Nutrition Research (New York, NY, United States) (2005), 25(3), 295-304
CODEN: NTRSDC; ISSN: 0271-5317
PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In the present study, Lactobacillus casei subsp casei strains JCM 1134T (Lcc) and JCM 8129 showed the ability to use dextran, whereas other tested species of Lactobacillus, Bifidobacterium, and intestinal bacteria tested did not. The number of live Lactobacillus species increased significantly in dextran-fed BALB/c mice 30 days after oral administration of Lcc. Further, Lcc was detected specifically using a polymerase chain reaction assay. When the BALB/c mice were orally given Lcc and its specific substrate dextran together with bovine serum albumin (BSA), a greater enhanced production of serum anti-BSA IgG was induced in comparison with those given BSA alone. These results clearly showed that a new synbiotic, probiotic Lcc and its prebiotic dextran in combination, exhibited immunoadjuvant activity in BALB/c mice.
ACCESSION NUMBER: 2005:224198 CAPLUS
DOCUMENT NUMBER: 142:390615
TITLE: Oral immunoadjuvant activity of a new synbiotic Lactobacillus casei subsp casei in conjunction with dextran in BALB/c mice
AUTHOR(S): Ogawa, Tomohiko; Asai, Yasuyuki; Yasuda, Kenji; Sakamoto, Hiromi
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, Gifu, 501-0296, Japan
SOURCE: Nutrition Research (New York, NY, United States) (2005), 25(3), 295-304
CODEN: NTRSDC; ISSN: 0271-5317
PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
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REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:857448 CAPLUS
DOCUMENT NUMBER: 141:337783

TITLE: Agent for improving function of detecting lesion in digestive tract by CT colonography or MR colonography, composition for washing intestinal tract, and kit or packaged article for washing intestinal tract
INVENTOR(S): Sugino, Yoshinori; Ito, Masaharu; Yamamoto, Kenji
PATENT ASSIGNEE(S): Ajinomoto Pharma Co., Ltd., Japan
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087218	A1	20041014	WO 2004-JP4542	20040330

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2003-94202 A 20030331

AB Disclosed are an agent for improving a function of detecting lesion in the digestive tract by CT colonog. or MR colonog. characterized by containing a serotonin 5-HT4 receptor stimulant as the active ingredient; and a composition for washing the intestinal tract by CT colonog. or MR colonog. characterized by containing a colloid osmotic pressure controlling agent and/or a crystalloid osmotic pressure controlling agent as the active ingredient(s). Thus, it is possible to provide a method of reducing an area in which examination cannot be conducted (i.e., a lesion-undetectable area) due to the remaining intestine-washing water or pooled intestinal fluid frequently observed in the large intestinal tract after washing in an examination of colon cancer, etc. by CT colonog. or MR colonog. It is also possible to provide a method of elevating the subject's acceptability for CT colonog. or MR colonog.

ACCESSION NUMBER: 2004:857448 CAPLUS
DOCUMENT NUMBER: 141:337783
TITLE: Agent for improving function of detecting lesion in digestive tract by CT colonography or MR colonography, composition for washing intestinal tract, and kit or packaged article for washing intestinal tract
INVENTOR(S): Sugino, Yoshinori; Ito, Masaharu; Yamamoto, Kenji
PATENT ASSIGNEE(S): Ajinomoto Pharma Co., Ltd., Japan
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087218	A1	20041014	WO 2004-JP4542	20040330

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2003-94202 A 20030331

AB Disclosed are an agent for improving a function of detecting lesion in the digestive tract by CT colonog. or MR colonog. characterized by containing a serotonin 5-HT4 receptor stimulant as the active ingredient; and a composition for washing the intestinal tract by CT colonog. or MR colonog. characterized by containing a colloid osmotic pressure controlling agent and/or a crystalloid osmotic pressure controlling agent as the active ingredient(s). Thus, it is possible to provide a method of reducing an area in which examination cannot be conducted (i.e., a lesion-undetectable area) due to the remaining intestine-washing water or pooled intestinal fluid frequently observed in the large intestinal tract after washing in an examination of colon cancer, etc. by CT colonog. or MR colonog. It is also possible to provide a method of elevating the subject's acceptability for CT colonog. or MR colonog.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:219662 CAPLUS
DOCUMENT NUMBER: 140:239953
TITLE: Air purifying filter using modified enzymes
INVENTOR(S): Tanaka, Atsuo; Gokano, Mikiko; Isomae, Kazuro
PATENT ASSIGNEE(S): Nikki-Universal Co., Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. 6,579,352.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004050254	A1	20040318	US 2001-13711	20011213
US 6730144	B2	20040504		
US 6579352	B1	20030617	US 1999-230114	19990122

PRIORITY APPLN. INFO.: US 1999-230114 A2 19990122
JP 1996-196288 A 19960725
WO 1997-JP2555 W 19970724

AB An air purifying filter includes a modified enzyme immobilized on a surface of a carrier. The modified enzyme has been modified with a bonding agent that improves bonding. The surface of the carrier has not been rendered to be water repellent prior to immobilizing the modified enzyme on the surface of the carrier. The bonding agent improves bonding of the modified enzyme to the carrier. By using bactericidal enzymes in combination with either non-enzyme proteins or peptides also having a bactericidal action or with polysaccharides, the ability of the filter to purify air by killing or otherwise controlling microorganisms can be enhanced in terms of the wider lysing spectrum. Bromine-N-substituted carbamate.

ACCESSION NUMBER: 2004:219662 CAPLUS
DOCUMENT NUMBER: 140:239953
TITLE: Air purifying filter using modified enzymes
INVENTOR(S): Tanaka, Atsuo; Gokano, Mikiko; Isomae, Kazuro
PATENT ASSIGNEE(S): Nikki-Universal Co., Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. 6,579,352.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004050254	A1	20040318	US 2001-13711	20011213
US 6730144	B2	20040504		
US 6579352	B1	20030617	US 1999-230114	19990122
PRIORITY APPLN. INFO.:			US 1999-230114 A2	19990122
			JP 1996-196288 A	19960725
			WO 1997-JP2555 W	19970724

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REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:696965 CAPLUS
DOCUMENT NUMBER: 139:210370
TITLE: Biosensor of bacterial protein and polysaccharide hydrogel in the determination of progesterone concentration in milk
INVENTOR(S): Koopal, Cornelis Gerardus Josephus
PATENT ASSIGNEE(S): Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek TNO, Neth.
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072665	A1	20030904	WO 2003-NL147	20030226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
NL 1020090	C2	20030829	NL 2002-1020090	20020228
AU 2003215963	A1	20030909	AU 2003-215963	20030226
PRIORITY APPLN. INFO.:			NL 2002-1020090 A	20020228
			WO 2003-NL147 W	20030226

AB A biosensor useful for measurements in not completely clean solns., e.g. milk., comprises a hydrophobic surface coated with a polysaccharide hydrogel, wherein a crystalline protein layer is applied between the hydrophobic surface and the hydrogel. The polysaccharide hydrogel is

preferably dextran and the crystalline protein layer preferably originates from surface proteins of bacteria, e.g., Lactobacillus.

ACCESSION NUMBER: 2003:696965 CAPLUS
DOCUMENT NUMBER: 139:210370
TITLE: Biosensor of bacterial protein and polysaccharide hydrogel in the determination of progesterone concentration in milk
INVENTOR(S): Koopal, Cornelis Gerardus Josephus
PATENT ASSIGNEE(S): Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek TNO, Neth.
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072665	A1	20030904	WO 2003-NL147	20030226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
NL 1020090	C2	20030829	NL 2002-1020090	20020228
AU 2003215963	A1	20030909	AU 2003-215963	20030226

PRIORITY APPLN. INFO.: NL 2002-1020090 A 20020228
WO 2003-NL147 W 20030226

AB A biosensor useful for measurements in not completely clean solns., e.g. milk., comprises a hydrophobic surface coated with a polysaccharide hydrogel, wherein a crystalline protein layer is applied between the hydrophobic surface and the hydrogel. The polysaccharide hydrogel is preferably dextran and the crystalline protein layer preferably originates from surface proteins of bacteria, e.g., Lactobacillus.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:254371 CAPLUS
DOCUMENT NUMBER: 135:106421
TITLE: Structural analysis by 13C-nuclear magnetic resonance spectroscopy of glucans elaborated by gum-producing bacteria isolated from palm wine
AUTHOR(S): Uzochukwu, S.; Balogh, E.; Loefler, R. T.; Ngoddy, P. O.
CORPORATE SOURCE: Department of Food Science and Technology, University of Agriculture, Abeokuta, Nigeria
SOURCE: Food Chemistry (2001), 73(2), 225-233
CODEN: FOCHDJ; ISSN: 0308-8146
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The linkages of the glucans produced by palm wine bacteria in sterile palm sap and in sucrose broth were determined using 13C NMR spectroscopy. The glucose units appeared to be linked α(-1-6) in the main chain. Therefore, the glucans are likely to be dextrans. There were branch linkages, and these differed between the genera of lactic acid bacteria (LAB) and even within one genus. However, branching by

α(-1-3) was a feature common to all the dextrans of the 3 organisms employed. The dextran of Leuconostoc dextranicum appeared to branch mainly by α(1-3) linkages with minor α(1-4) ones; that of Leuconostoc mesenteroides, mainly by α(-1-2) and that of the Lactobacillus spp. by only α(1-3) linkages. The organisms were found to elaborate more highly branched dextrans in sucrose broth than in palm sap probably due to nutrient differences, but the branch linkage types remained the same. The degree of branching did not appear to affect the viscosity. Thus, gums produced by palm wine glucan-producers were dextrans and these different dextran-producing bacteria, in palm wine, each produced its own peculiar type of dextran in the beverage.

ACCESSION NUMBER: 2001:254371 CAPLUS
DOCUMENT NUMBER: 135:106421
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AUTHOR(S): Uzochukwu, S.; Balogh, E.; Loefler, R. T.; Ngoddy, P. O.
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CODEN: FOCHDJ; ISSN: 0308-8146
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

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REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:176695 CAPLUS
DOCUMENT NUMBER: 132:321358
TITLE: In vitro fermentability of dextran, oligodextran and maltodextrin by human gut bacteria
AUTHOR(S): Olano-Martin, Estibaliz; Mountzouris, Konstantinos C.; Gibson, Glenn R.; Rastall, Robert A.
CORPORATE SOURCE: Department of Food Science and Technology, The University of Reading, Reading, RG6 6AP, UK
SOURCE: British Journal of Nutrition (2000), 83(3), 247-255
CODEN: BJNUAV; ISSN: 0007-1145
PUBLISHER: CABI Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Anaerobic batch culture fermenters were used to study the in vitro utilization by human gut microflora of dextran, maltodextrin, and 4 novel oligodextrans. Glucose and fructooligosaccharides (FOS) were used as reference

carbohydrates. FOS acted as good prebiotics and selectively increased the bifidobacteria counts in the early stages of fermentation Dextran and oligodextrans increased bifidobacteria counts in the batch cultures with high levels of persistence up to 48 h. They also elevated butyrate levels to 5-14.85 mM. To more effectively simulate the conditions that prevail in different parts of the large intestine, a 3-stage continuous culture cascade system was used to further study the fermentation of dextran, a low-mol.-mass oligodextran (IV), and maltodextrin. Oligodextran IV was the best substrate for bifidobacteria and lactobacilli, with steady-state populations of bifidobacteria and lactobacilli being higher in all 3 fermentation vessels of the gut model compared with populations in dextran and maltodextrin fermns. The maximum difference of 1.9 log was observed in the vessel 1 for both bifidobacteria and lactobacilli in dextran fermentation, while 1.4 and 0.8 log in vessel 3 were the maximum differences for bifidobacteria and lactobacilli when maltodextrin was used as the carbohydrate source. Dextran and oligodextran stimulated the butyrate production, with a maximum production up to 25.39 mM in vessel 3 when fermenting dextran, followed by 21.70 mM with oligodextran IV, and only 12.64 mM with maltodextrin.

ACCESSION NUMBER: 2000:176695 CAPLUS
DOCUMENT NUMBER: 132:321358
TITLE: In vitro fermentability of dextran, oligodextran and maltodextrin by human gut bacteria
AUTHOR(S): Olano-Martin, Estibaliz; Mountzouris, Konstantinos C.; Gibson, Glenn R.; Rastall, Robert A.
CORPORATE SOURCE: Department of Food Science and Technology, The University of Reading, Reading, RG6 6AP, UK
SOURCE: British Journal of Nutrition (2000), 83(3), 247-255
CODEN: BJNUAV; ISSN: 0007-1145
PUBLISHER: CABI Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

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REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 13 OF 37 CAPLUS
ACCESSION NUMBER: 1999:126718 CAPLUS
DOCUMENT NUMBER: 130:351579
TITLE: Effect of mixed feed containing dextran on Salmonella colonization in chicks
AUTHOR(S): Fukata, Tsuneo; Sasai, Kazumi; Miyamoto, Tadashi; Baba, Eiichiroh

CORPORATE SOURCE: Department of Veterinary Medicine, College of Agriculture, Osaka Prefecture University, Sakai, Osaka, 599 8531, Japan
SOURCE: Nippon Juishikai Zasshi (1999), 52(2), 125-128
CODEN: NIPJAV; ISSN: 0446-6454
PUBLISHER: Nippon Juishikai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Effect of mixed feed containing dextran oligosaccharide (Dex) on Salmonella Enteritidis (S. Enteritidis) colonization was evaluated in chicks. In chicks fed 0.3% Dex after hatching and inoculated orally at 1 wk of age, cecal bacterial count was significantly lower than control at 7 days postinoculation. In chicks having treated with the competitive exclusion (CE) (0.2 mL) at hatching and then with Dex, cecal bacterial count was significantly lower than control at 1 day after oral inoculation at 3 wk of age.
ACCESSION NUMBER: 1999:126718 CAPLUS
DOCUMENT NUMBER: 130:351579
TITLE: Effect of mixed feed containing dextran on Salmonella colonization in chicks
AUTHOR(S): Fukata, Tsuneo; Sasai, Kazumi; Miyamoto, Tadashi; Baba, Eiichiroh
CORPORATE SOURCE: Department of Veterinary Medicine, College of Agriculture, Osaka Prefecture University, Sakai, Osaka, 599 8531, Japan
SOURCE: Nippon Juishikai Zasshi (1999), 52(2), 125-128
CODEN: NIPJAV; ISSN: 0446-6454
PUBLISHER: Nippon Juishikai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
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L14 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:557652 CAPLUS
DOCUMENT NUMBER: 127:225300
TITLE: Pharmaceutical compositions containing urogenital and intestinal disorders comprising a substance derived from plant species of the ericaceae family and a lactic acid bacteria
INVENTOR(S): Carella, Anne Marie; Sagel, Paul Joseph
PATENT ASSIGNEE(S): Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9729763	A1	19970821	WO 1997-US1665	19970206

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,

MR, NE, SN, TD, TG

IN 1997DE00312	A	20050311	IN 1997-DE312	19970205
IN 1997DE00313	A	20050311	IN 1997-DE313	19970205
CA 2246371	A1	19970821	CA 1997-2246371	19970206
AU 9718542	A	19970902	AU 1997-18542	19970206
EP 881905	A1	19981209	EP 1997-904185	19970206
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1211189	A	19990317	CN 1997-192256	19970206
JP 11504049	T	19990406	JP 1997-529374	19970206
PRIORITY APPLN. INFO.:			US 1996-601482 A	19960214
			US 1996-630096 A	19960409
			WO 1997-US1665 W	19970206

AB Pharmaceutical compns. useful in preventing and/or treating urogenital and intestinal disorders, comprising an effective amount of at least one plant species of the Ericaceae family or its extract and an effective amount of a growth factor for stimulating the growth of lactic acid bacteria , the growth factor selected from the group consisting of glycogen, rhamnose, gangliosides, salicin, oligosaccharides, galactose, lactulose, methyl-α-D-mannoside, p-nitrophenol-α-D-mannoside, maltose, dextrin, dextran, levan, sialic acid, acetylglucosamine, yeast exts., peptone, keratin, vegetable, soy, lauric acid, glycerophosphates and mixts. thereof. A tablet contained concentrated cranberry extract 17.600, fructoologosaccharide 56.340, Et cellulose 9.900, starch 11.230, talc 4.230, and stearic acid 0.700%.

ACCESSION NUMBER: 1997:557652 CAPLUS
DOCUMENT NUMBER: 127:225300
TITLE: Pharmaceutical compositions containing urogenital and intestinal disorders comprising a substance derived from plant species of the ericaceae family and a lactic acid bacteria
INVENTOR(S): Carella, Anne Marie; Sagel, Paul Joseph
PATENT ASSIGNEE(S): Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9729763	A1	19970821	WO 1997-US1665	19970206
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
IN 1997DE00312	A	20050311	IN 1997-DE312	19970205
IN 1997DE00313	A	20050311	IN 1997-DE313	19970205
CA 2246371	A1	19970821	CA 1997-2246371	19970206
AU 9718542	A	19970902	AU 1997-18542	19970206
EP 881905	A1	19981209	EP 1997-904185	19970206
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1211189	A	19990317	CN 1997-192256	19970206
JP 11504049	T	19990406	JP 1997-529374	19970206
PRIORITY APPLN. INFO.:			US 1996-601482 A	19960214
			US 1996-630096 A	19960409
			WO 1997-US1665 W	19970206

AB Pharmaceutical compns. useful in preventing and/or treating urogenital and intestinal disorders, comprising an effective amount of at least one plant species of the Ericaceae family or its extract and an effective amount of a growth factor for stimulating the growth of lactic acid bacteria

, the growth factor selected from the group consisting of glycogen, rhamnose, gangliosides, salicin, oligosaccharides, galactose, lactulose, methyl-α-D-mannoside, p-nitrophenol-α-D-mannoside, maltose, dextrin, dextran, levan, sialic acid, acetylglucosamine, yeast exts., peptone, keratin, vegetable, soy, lauric acid, glycerophosphates and mixts. thereof. A tablet contained concentrated cranberry extract 17.600, fructoologosaccharide 56.340, Et cellulose 9.900, starch 11.230, talc 4.230, and stearic acid 0.700%.

L14 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:359776 CAPLUS
DOCUMENT NUMBER: 125:18717
TITLE: Bacteriophage-encoded enzymes for the treatment and prevention of dental caries and periodontal diseases
INVENTOR(S): Delisle, Allan L.
PATENT ASSIGNEE(S): University of Maryland, USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9607329	A1	19960314	WO 1995-US11465	19950907
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2199478	A1	19960314	CA 1995-2199478	19950907
EP 776163	A1	19970604	EP 1995-931789	19950907
R: DE, DK, ES, FR, GB, IT, NL				
US 2004071636	A1	20040415	US 2003-420962	20030423
US 6955893	B2	20051018		

PRIORITY APPLN. INFO.:
US 1994-303625 A 19940909
WO 1995-US11465 W 19950907
US 1997-886119 B1 19970630
US 2001-951674 A3 20010914

AB A method for the treatment and prevention of dental caries and periodontal diseases using bacteriophages and phage-encoded antibacterial enzymes to inhibit establishment of bacteria in the oral cavity is provided. Also provided are methods for studying the cell wall of an oral bacteria, a method for preventing spoilage of perishable items and a method for removing dextrans from surfaces utilized in sugar manufacture Purified enzymes and the isolated DNA fragments encoding them are also provided.

ACCESSION NUMBER: 1996:359776 CAPLUS
DOCUMENT NUMBER: 125:18717
TITLE: Bacteriophage-encoded enzymes for the treatment and prevention of dental caries and periodontal diseases
INVENTOR(S): Delisle, Allan L.
PATENT ASSIGNEE(S): University of Maryland, USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9607329	A1	19960314	WO 1995-US11465	19950907
W: CA, JP				

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

CA 2199478	A1	19960314	CA 1995-2199478	19950907
EP 776163	A1	19970604	EP 1995-931789	19950907
R: DE, DK, ES, FR, GB, IT, NL				
US 2004071636	A1	20040415	US 2003-420962	20030423
US 6955893	B2	20051018		

PRIORITY APPLN. INFO.:

US 1994-303625	A 19940909
WO 1995-US11465	W 19950907
US 1997-886119	B1 19970630
US 2001-951674	A3 20010914

AB A method for the treatment and prevention of dental caries and periodontal diseases using bacteriophages and phage-encoded antibacterial enzymes to inhibit establishment of bacteria in the oral cavity is provided. Also provided are methods for studying the cell wall of an oral bacteria, a method for preventing spoilage of perishable items and a method for removing dextrans from surfaces utilized in sugar manufacture Purified enzymes and the isolated DNA fragments encoding them are also provided.

L14 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:878038 CAPLUS
DOCUMENT NUMBER: 123:338012
TITLE: Microbiological and chemical characterization of "sugar grains".
AUTHOR(S): Zacconi, C.; Dallavalle, P.; Vescovo, M.; Parisi, M. G.; Scolari, G.
CORPORATE SOURCE: Istituto di Microbiologia, Univ. Cattolica del Sacro Cuore, Piacenza, 29100, Italy
SOURCE: Annali di Microbiologia ed Enzimologia (1995), 45(Pt. 1), 27-36
CODEN: AMEZAB; ISSN: 0003-4649
PUBLISHER: Universita degli Studi di Milano
DOCUMENT TYPE: Journal
LANGUAGE: English

AB "Sugar grains", named Tibi grains, used for producing a midly-acid alc. beverage, have been studied. The microbiol. study has been carried out under different culture conditions. Several bacterial groups have been found: yeasts, lactic acid bacteria as Lactobacillus hilgardii, Lactobacillus casei and various contaminants assigned to Klebsiella oxytoca, Enterobacter cloacae and other Gram neg. bacteria. Enzymic treatments of the grains indicate that they are constituted of dextrans.

ACCESSION NUMBER: 1995:878038 CAPLUS
DOCUMENT NUMBER: 123:338012
TITLE: Microbiological and chemical characterization of "sugar grains".
AUTHOR(S): Zacconi, C.; Dallavalle, P.; Vescovo, M.; Parisi, M. G.; Scolari, G.
CORPORATE SOURCE: Istituto di Microbiologia, Univ. Cattolica del Sacro Cuore, Piacenza, 29100, Italy
SOURCE: Annali di Microbiologia ed Enzimologia (1995), 45(Pt. 1), 27-36
CODEN: AMEZAB; ISSN: 0003-4649
PUBLISHER: Universita degli Studi di Milano
DOCUMENT TYPE: Journal
LANGUAGE: English

AB "Sugar grains", named Tibi grains, used for producing a midly-acid alc. beverage, have been studied. The microbiol. study has been carried out under different culture conditions. Several bacterial groups have been found: yeasts, lactic acid bacteria as Lactobacillus hilgardii, Lactobacillus casei and various contaminants assigned to Klebsiella oxytoca, Enterobacter cloacae and other Gram neg. bacteria. Enzymic treatments of the grains indicate that they are constituted of dextrans.

L14 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:671801 CAPLUS
DOCUMENT NUMBER: 147:79588
TITLE: Pharmaceutical compositions comprising oxalate-degrading or oxalate-reducing bacteria and enzymes and methods for treating or preventing oxalate-related disease
INVENTOR(S): Sidhu, Harmeet; Kaul, Poonam
PATENT ASSIGNEE(S): Oxthera, Inc., USA
SOURCE: PCT Int. Appl., 73pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007070677	A2	20070621	WO 2006-US47909	20061214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
WO 2007070052	A2	20070621	WO 2005-US45457	20051214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: WO 2005-US45457 A 20051214

AB The present invention comprises methods and compns. for the reduction of oxalate in humans, animals and plants. For example, the invention provides methods and compns. for the delivery of one or more oxalate-reducing pharmaceutical compns. to the intestinal tracts of persons and animals. The methods and compns. can be used in treating and preventing oxalate-related conditions. A composition of the invention comprises an oral delivery vehicle comprising an oxalate degrading bacteria, one or more cryopreserving agents and one or more excipients. A composition of the invention is enteric coated and has a suitable shelf-life and acceptable properties to avoid neg. impact from gastric fluid when it is orally administered. Thus, the effects of oral administration of Oxalobacter formigenes on urinary oxalate levels were tested in patients suffering from primary hyperoxaluria. O. formigenes 1 g cell paste (> 1010 cfus/g) bid was administered to the patients for 4 wk. Treatment demonstrated a significant lowering of urinary oxalate in subjects with normal urine function. There was a dramatic lowering of plasma oxalate in two subjects with end-stage renal disease providing evidence for enteric elimination of endogenous oxalate into the gut

against a transepithelial gradient. Consumption of O. formigenes strain HC-1 at dosages ranging from 0.25 g to 2.0 g per meal were well tolerated by normal, healthy volunteers receiving diets containing average or high oxalate levels.

ACCESSION NUMBER: 2007:671801 CAPLUS
DOCUMENT NUMBER: 147:79588
TITLE: Pharmaceutical compositions comprising oxalate-degrading or oxalate-reducing bacteria and enzymes and methods for treating or preventing oxalate-related disease
INVENTOR(S): Sidhu, Harmeet; Kaul, Poonam
PATENT ASSIGNEE(S): Oxthera, Inc., USA
SOURCE: PCT Int. Appl., 73pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007070677	A2	20070621	WO 2006-US47909	20061214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
WO 2007070052	A2	20070621	WO 2005-US45457	20051214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: WO 2005-US45457 A 20051214

AB The present invention comprises methods and compns. for the reduction of oxalate in humans, animals and plants. For example, the invention provides methods and compns. for the delivery of one or more oxalate-reducing pharmaceutical compns. to the intestinal tracts of persons and animals. The methods and compns. can be used in treating and preventing oxalate-related conditions. A composition of the invention comprises an oral delivery vehicle comprising an oxalate degrading bacteria, one or more cryopreserving agents and one or more excipients. A composition of the invention is enteric coated and has a suitable shelf-life and acceptable properties to avoid neg. impact from gastric fluid when it is orally administered. Thus, the effects of oral administration of Oxalobacter formigenes on urinary oxalate levels were tested in patients suffering from primary hyperoxaluria. O. formigenes 1 g cell paste (> 1010 cfus/g) bid was administered to the patients for 4 wk. Treatment demonstrated a significant lowering of urinary oxalate in

subjects with normal urine function. There was a dramatic lowering of plasma oxalate in two subjects with end-stage renal disease providing evidence for enteric elimination of endogenous oxalate into the gut against a transepithelial gradient. Consumption of O. formigenes strain HC-1 at dosages ranging from 0.25 g to 2.0 g per meal were well tolerated by normal, healthy volunteers receiving diets containing average or high oxalate
levels.

L14 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1251699 CAPLUS
DOCUMENT NUMBER: 146:1688
TITLE: Sequence and application of Scytovirin domain 1-related polypeptides
INVENTOR(S): O'Keefe, Barry; Xiong, Chang-Yun; McMahon, James B.; Byrd, Andrew
PATENT ASSIGNEE(S): Government of the United States of America, Represented by the Secretary, Department of Health and Human Services, USA
SOURCE: PCT Int. Appl., 38pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006127822	A2	20061130	WO 2006-US20100	20060524
WO 2006127822	A3	20070412		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2005-684353P P 20050525
AB The invention relates to the sequences of a Scytovirin domain 1 (SD1)-related polypeptide and a nucleic acid encoding the polypeptide. The invention also claims the fusion proteins, conjugates and antibodies generated from the SD1-related polypeptides.
ACCESSION NUMBER: 2006:1251699 CAPLUS
DOCUMENT NUMBER: 146:1688
TITLE: Sequence and application of Scytovirin domain 1-related polypeptides
INVENTOR(S): O'Keefe, Barry; Xiong, Chang-Yun; McMahon, James B.; Byrd, Andrew
PATENT ASSIGNEE(S): Government of the United States of America, Represented by the Secretary, Department of Health and Human Services, USA
SOURCE: PCT Int. Appl., 38pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2006127822	A2	20061130	WO 2006-US20100	20060524
WO 2006127822	A3	20070412		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2005-684353P P 20050525

AB The invention relates to the sequences of a Scytovirin domain 1 (SD1)-related polypeptide and a nucleic acid encoding the polypeptide. The invention also claims the fusion proteins, conjugates and antibodies generated from the SD1-related polypeptides.

L14 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:991870 CAPLUS
DOCUMENT NUMBER: 146:458198
TITLE: Identification of a lactic bacterium strain used for obtaining a pollen-based probiotic product
AUTHOR(S): Vamanu, Adrian; Vamanu, Emanuel; Drugulescu, Manuel; Popa, Ovidiu; Campeanu, Gheorghe
CORPORATE SOURCE: Faculty of Biotechnology, The University of the Agronomical Sciences and Veterinary Medicine, Bucharest, Bucharest, Rom.
SOURCE: Turkish Journal of Biology (2006), 30(2), 75-80
CODEN: TJBIEZ; ISSN: 1300-0152
PUBLISHER: Scientific and Technological Research Council of Turkey
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This study concerns the identification of a Lactobacillus acidophilus strain by conventional taxonomic techniques (cultivation at different temps., different pH values, use of different carbon sources, development on different media and determination of antibiotic resistance) and by mol. genetic techniques (determination of G and C content). The strain is used for inoculation in media with ground or unground pollen and honey, in order to obtain a probiotic product. Over 72 h the glucid consumption, cell viability and acid production is measured.

ACCESSION NUMBER: 2006:991870 CAPLUS
DOCUMENT NUMBER: 146:458198
TITLE: Identification of a lactic bacterium strain used for obtaining a pollen-based probiotic product
AUTHOR(S): Vamanu, Adrian; Vamanu, Emanuel; Drugulescu, Manuel; Popa, Ovidiu; Campeanu, Gheorghe
CORPORATE SOURCE: Faculty of Biotechnology, The University of the Agronomical Sciences and Veterinary Medicine, Bucharest, Bucharest, Rom.
SOURCE: Turkish Journal of Biology (2006), 30(2), 75-80
CODEN: TJBIEZ; ISSN: 1300-0152
PUBLISHER: Scientific and Technological Research Council of Turkey
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This study concerns the identification of a Lactobacillus acidophilus strain by conventional taxonomic techniques (cultivation at different temps., different pH values, use of different carbon sources,

development on different media and determination of antibiotic resistance) and by
mol. genetic techniques (determination of G and C content). The strain is used for inoculation in media with ground or unground pollen and honey, in order to obtain a probiotic product. Over 72 h the glucid consumption, cell viability and acid production is measured.
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:361031 CAPLUS
DOCUMENT NUMBER: 144:410862
TITLE: Enzymatic synthesis of prebiotic oligosaccharides
AUTHOR(S): Rabelo, Maria C.; Honorato, Talita L.; Goncalves, Luciana R. B.; Pinto, Gustavo A. S.; Rodrigues, Sueli
CORPORATE SOURCE: Departamento de Tecnologia de Alimentos, Universidade Federal do Ceara, Fortaleza, CEP 60356-000, Brazil
SOURCE: Applied Biochemistry and Biotechnology (2006), 133(1), 31-40
CODEN: ABIBDL; ISSN: 0273-2289
PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:410862
AB Prebiotic oligosaccharides are nondigestible carbohydrates that can be obtained by enzymic synthesis. Glucosyltransferases can be used to produce these carbohydrates through an acceptor reaction synthesis. When maltose is the acceptor a trisaccharide composed of one maltose unit and one glucose unit linked by an α-1,6-glycosidic bond (panose) is obtained as the primer product of the dextransucrase acceptor reaction. In this work, panose enzymic synthesis was evaluated by a central composite exptl. design in which maltose and sucrose concentration were varied in
a wide range of maltose/sucrose ratios in a batch reactor system. A partially purified enzyme was used in order to reduce the process costs, because enzyme purification is one of the most expensive steps in enzymic synthesis. Even using high maltose/sucrose ratios, dextran and higher-oligosaccharide formation were not avoided. The results showed that intermediate concns. of sucrose and high maltose concentration resulted in high panose productivity with low dextran and higher-oligosaccharide productivity.
ACCESSION NUMBER: 2006:361031 CAPLUS
DOCUMENT NUMBER: 144:410862
TITLE: Enzymatic synthesis of prebiotic oligosaccharides
AUTHOR(S): Rabelo, Maria C.; Honorato, Talita L.; Goncalves, Luciana R. B.; Pinto, Gustavo A. S.; Rodrigues, Sueli
CORPORATE SOURCE: Departamento de Tecnologia de Alimentos, Universidade Federal do Ceara, Fortaleza, CEP 60356-000, Brazil
SOURCE: Applied Biochemistry and Biotechnology (2006), 133(1), 31-40
CODEN: ABIBDL; ISSN: 0273-2289
PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:410862
AB Prebiotic oligosaccharides are nondigestible carbohydrates that can be obtained by enzymic synthesis. Glucosyltransferases can be used to produce these carbohydrates through an acceptor reaction synthesis. When maltose is the acceptor a trisaccharide composed of one maltose unit and one glucose unit linked by an α-1,6-glycosidic bond (panose) is obtained as the primer product of the dextransucrase acceptor reaction. In this work, panose enzymic synthesis was evaluated by a central composite exptl. design in which maltose and sucrose concentration were varied in

a wide range of maltose/sucrose ratios in a batch reactor system. A partially purified enzyme was used in order to reduce the process costs, because enzyme purification is one of the most expensive steps in enzymic synthesis. Even using high maltose/sucrose ratios, dextran and higher-oligosaccharide formation were not avoided. The results showed that intermediate concns. of sucrose and high maltose concentration resulted in high panose productivity with low dextran and higher-oligosaccharide productivity.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:319916 CAPLUS
DOCUMENT NUMBER: 144:411561
TITLE: Oral immunoadjuvant activity of Lactobacillus casei subsp. casei in dextran-fed layer chickens
AUTHOR(S): Ogawa, Tomohiko; Asai, Yasuyuki; Sakamoto, Hiromi; Yasuda, Kenji
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, 1851-1 Hozumi, Mizuho, Gifu, 501-0296, Japan
SOURCE: British Journal of Nutrition (2006), 95(2), 430-434 CODEN: BJNUAV; ISSN: 0007-1145
PUBLISHER: CABI Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We recently reported that symbiotic Lactobacillus casei subsp. casei together with specific substrate dextran elicited an enhancement in humoral immune response against bovine serum albumin (BSA) as a model antigen in BALB/c mice. The present study was designed to evaluate the oral immunoadjuvant effects of the symbiotic in layer chickens. Using a PCR assay, L. casei subsp. casei was detected specifically in the intestinal chyme of chickens (10 d of age, Julia strain) fed ad libitum on a diet supplemented with 75 mg dextran/kg (dextran-supplemented diet, DSD) and administered orally with 107 colony-forming units (CFU) L. casei subsp. casei in 0·1 mL PBS with the aid of an intubation needle at 1, 2 and 3 d of age. Furthermore, oral administration of 107 CFU L. casei subsp. casei at 1-3 d of age significantly enhanced the production of anti-BSA antibody in DSD-fed chickens (60 d of age) administered orally with 1 mg BSA at 32 and 33 d of age and s.c. with 5 μg BSA at 33 d of age. In addition, among bacterial nos. tested, 106 CFU L. casei subsp. casei together with dextran induced an effective increase in humoral immune response to mixed inactivated vaccines against Newcastle disease and avian infectious bronchitis, and the treatment may be advantageous in protecting against these infectious diseases in chickens in actual application. These results suggest that dietary supplementation of L. casei subsp. casei with dextran leads to immunomodulation of humoral immune responses.

ACCESSION NUMBER: 2006:319916 CAPLUS
DOCUMENT NUMBER: 144:411561
TITLE: Oral immunoadjuvant activity of Lactobacillus casei subsp. casei in dextran-fed layer chickens
AUTHOR(S): Ogawa, Tomohiko; Asai, Yasuyuki; Sakamoto, Hiromi; Yasuda, Kenji
CORPORATE SOURCE: Department of Oral Microbiology, Asahi University School of Dentistry, 1851-1 Hozumi, Mizuho, Gifu, 501-0296, Japan
SOURCE: British Journal of Nutrition (2006), 95(2), 430-434 CODEN: BJNUAV; ISSN: 0007-1145
PUBLISHER: CABI Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We recently reported that symbiotic Lactobacillus casei subsp. casei together with specific substrate dextran elicited an enhancement in

humoral immune response against bovine serum albumin (BSA) as a model antigen in BALB/c mice. The present study was designed to evaluate the oral immunoadjuvant effects of the symbiotic in layer chickens. Using a PCR assay, L. casei subsp. casei was detected specifically in the intestinal chyme of chickens (10 d of age, Julia strain) fed ad libitum on a diet supplemented with 75 mg dextran/kg (dextran-supplemented diet, DSD) and administered orally with 107 colony-forming units (CFU) L. casei subsp. casei in 0·1 mL PBS with the aid of an intubation needle at 1, 2 and 3 d of age. Furthermore, oral administration of 107 CFU L. casei subsp. casei at 1-3 d of age significantly enhanced the production of anti-BSA antibody in DSD-fed chickens (60 d of age) administered orally with 1 mg BSA at 32 and 33 d of age and s.c. with 5 μg BSA at 33 d of age. In addition, among bacterial nos. tested, 106 CFU L. casei subsp. casei together with dextran induced an effective increase in humoral immune response to mixed inactivated vaccines against Newcastle disease and avian infectious bronchitis, and the treatment may be advantageous in protecting against these infectious diseases in chickens in actual application. These results suggest that dietary supplementation of L. casei subsp. casei with dextran leads to immunomodulation of humoral immune responses.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:309568 CAPLUS
DOCUMENT NUMBER: 142:353389
TITLE: Cytochemical method for estimating vaginal microbiocenosis for diagnosis of vaginal diseases
INVENTOR(S): Voropaeva, E. A.; Afanas'ev, S. S.; Aleshkin, V. A.; Vorob'ev, A. A.; Nesvizhskii, Yu. V.; Rubal'skii, O. V.; Filatova, N. G.; Kudryavtseva, M. V.; Afanas'ev, M. S.; Matveevskaya, N. S.
PATENT ASSIGNEE(S): Gosudarstvennoe Uchrezhdenie "Moskovskii Nauchno-Issledovatel'skii Institut Epidemiologii i Mikrobiologii G. N. Gabrichevskogo Ministerstva Zdrav, Russia
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2249821	C1	20050410	RU 2004-112817	20040427

PRIORITY APPLN. INFO.: RU 2004-112817 20040427

AB The method involves taking scrape sample from the vagina, then swab with 5 mL of 6.0% polyglucin solution Cytochem. study of the swab sample stained after Gram is carried out to determine bacterial epithelial cell insemination degree, the number of leukocytes and key cells. Vaginal discharge and swab material inoculation is carried out from serial dilns. on culture media to determine the amount of lactobacilli, and conditionally pathogenic elective anaerobic microflora. IgA, sIgA, IgM and free secretory component are determined in the swab from vagina. The obtained data are compared to reference values set for vaginal normocenosis, intermediate vaginal microbiocenosis type, vaginal dysbiosis and bacterial vaginitis and conclusions are drawn concerning vaginal microbiocenosis. The method provides high accuracy in diagnosing vaginal microbiocenosis changes.

ACCESSION NUMBER: 2005:309568 CAPLUS
DOCUMENT NUMBER: 142:353389
TITLE: Cytochemical method for estimating vaginal microbiocenosis for diagnosis of vaginal diseases

INVENTOR(S): Voropaeva, E. A.; Afanas'ev, S. S.; Aleshkin, V. A.; Vorob'ev, A. A.; Nesvizhskii, Yu. V.; Rubal'skii, O. V.; Filatova, N. G.; Kudryavtseva, M. V.; Afanas'ev, M. S.; Matveevskaya, N. S.

PATENT ASSIGNEE(S): Gosudarstvennoe Uchrezhdenie "Moskovskii Nauchno-Issledovatel'skii Institut Epidemiologii i Mikrobiologii G. N. Gabrichevskogo Ministerstva Zdrav, Russia

SOURCE: Russ., No pp. given
CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2249821	C1	20050410	RU 2004-112817	20040427

PRIORITY APPLN. INFO.: RU 2004-112817 20040427

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L17 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:80862 CAPLUS
DOCUMENT NUMBER: 140:108030
TITLE: Dextran for selective growth of Lactobacillus casei casei
INVENTOR(S): Yasuda, Kenji; Ogawa, Tomohiko; Hasegawa, Masakatsu
PATENT ASSIGNEE(S): Meito Sangyo Co., Ltd, Japan
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009800	A1	20040129	WO 2003-JP9272	20030722
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2493644	A1	20040129	CA 2003-2493644	20030722
AU 2003281529	A1	20040209	AU 2003-281529	20030722
EP 1541672	A1	20050615	EP 2003-741533	20030722
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
IN 2005CN00222	A	20070615	IN 2005-CN222	20050221
US 2006127378	A1	20060615	US 2005-521947	20050224
JP 2007112805	A	20070510	JP 2006-313106	20061120

PRIORITY APPLN. INFO.:

JP 2002-212336	A	20020722
JP 2004-522778	A3	20030722
WO 2003-JP9272	W	20030722

AB The growth of enteric probiotic L. casei subsp is promoted with dextran, especially the dextran with a mol.-weight of 2000 to 4000. The dextran can selectively promotes the growth of the enteric L. casei casei without constant taking and supplying the probiotic bacteria preparation or products. It also promoting immune system activity in Balb/c mice. Also given was the microbial production of dextran from sucrose with Leuconostoc mesenteroides.
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:878040 CAPLUS
DOCUMENT NUMBER: 123:284098
TITLE: Microbiological and chemical composition of "sugar" Kefir grains
AUTHOR(S): Galli, A.; Fiori, E.; Franzetti, L.; Pagani, M. A.; Ottogalli, G.
CORPORATE SOURCE: Dipartimento di Scienze e Tecnologie Alimentari e Microbiologiche, Univ. delgi Studi di Milano, Milan, Italy
SOURCE: Annali di Microbiologia ed Enzimologia (1995), 45(Pt. 1), 85-95
CODEN: AMEZAB; ISSN: 0003-4649

PUBLISHER: Universita degli Studi di Milano
DOCUMENT TYPE: Journal
LANGUAGE: Italian
AB Some different Kefir grains used for the preparation of the acid-alc. beverage called sugar kefir have been examined on the structural, chemical and microbiol. point of view. They were irregular in shape and had a diameter going from a few mm to several cm; white hyaline color, translucent, unelastic and rather fragile; and 95-97% are composed of polysaccharides (dextrans) with chains of glucose only. Inside the matrix the lactic acid bacteria L. casei subsp. casei e L. casei subsp. pseudoplantarum, Leuconostoc spp. and Pediococcus spp.) were found but not the yeasts (S. cerevisiae, and Hanseniaspora spp.) which are located in the interstitial liquid; therefore they are detectable by cultural assay and optical microscopy, but cannot be observed by scanning electronic microscopy. Lactic acid bacteria, L. casei subsp. casei and L. casei subsp. pseudoplantarum, are considered to be responsible for the polymers production

L18 ANSWER 1 OF 2 MEDLINE on STN
ACCESSION NUMBER: 2007139790 MEDLINE
DOCUMENT NUMBER: PubMed ID: 17339767
TITLE: A new synbiotic consisting of Lactobacillus casei subsp. casei and dextran improves milk production in Holstein dairy cows.
AUTHOR: Yasuda Kenji; Hashikawa Shinnosuke; Sakamoto Hiromi; Tomita Yuichi; Shibata Sanae; Fukata Tsuneo
CORPORATE SOURCE: The Nagoya Research Laboratory, Meito Sangyo Co., Ltd., Kiyosu, Aichi, Japan.
SOURCE: The Journal of veterinary medical science / the Japanese Society of Veterinary Science, (2007 Feb) Vol. 69, No. 2, pp. 205-8.
Journal code: 9105360. ISSN: 0916-7250.
PUB. COUNTRY: Japan
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
(CLINICAL TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200704
ENTRY DATE: Entered STN: 7 Mar 2007
Last Updated on STN: 20 Apr 2007
Entered Medline: 19 Apr 2007

AB To evaluate the effects of a new synbiotic consisting of Lactobacillus casei subsp. casei (Lcc) and dextran (Dex) on milk production, a total of 58 Holstein dairy cows, which became pregnant and gave birth to calves at regular intervals and lactated steadily and continuously, were selected. The study had a completely randomized design, and the animals were divided into two groups. Group A was fed with a basic diet only, and Group B was fed with a basic diet supplemented with the synbiotic consisting of freeze-dried Lcc and mixed feed containing Dex for one year from August 2004. After supplementation with the synbiotic, milk yields and components of Group B were compared with those of Group A in the August, December of 2004, April and August of 2005. Milk yields of Group B were greater than those of Group A. There were significant differences ($p<0.01$ or 0.05) between these groups for all values. Furthermore, total amounts of fat, protein and solid non-fat in Group B significantly increased in comparison with those of Group A. In addition, the somatic cell counts of Group A significantly increased in August of 2004 and 2005 in comparison with those of Group B. Thus, the new synbiotic consisting of Lcc and Dex can increase the milk production of Holstein dairy cows throughout the year.

L18 ANSWER 2 OF 2 MEDLINE on STN
ACCESSION NUMBER: 2004556746 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15528867
TITLE: Mixed feed containing dextran improves milk production of holstein dairy cows.
AUTHOR: Yasuda Kenji; Fukata Tsuneo
CORPORATE SOURCE: Nagoya Research Laboratory, Meito Sangyo Co., Ltd., Aichi, Japan.
SOURCE: The Journal of veterinary medical science / the Japanese Society of Veterinary Science, (2004 Oct) Vol. 66, No. 10, pp. 1287-8.
Journal code: 9105360. ISSN: 0916-7250.
PUB. COUNTRY: Japan
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200501

ENTRY DATE: Entered STN: 6 Nov 2004
Last Updated on STN: 19 Jan 2005
Entered Medline: 18 Jan 2005

AB Total 37 Holstein daily cows (body weight: 631.76 +/- 18.45 kg, age: 5.47 +/- 1.94 years, parturition: 3.71 +/- 1.76 times) which became pregnant and gave birth to calves in the same season and lactated continuously were selected for this study. They were randomly divided into two groups: Group A-control, Group B-fed with 30 g/head/day of mixed feed containing supplemental dextran for one year from October 2001. After supplementation of the mixed feed, milk yields and components (fat, protein and solid non-fat) of Group B were compared with those of Group A in the 8th, 10th and 11th months (May, July and August of 2002). Milk yields of Group B were greater than the yields of Group A. In particular, there was a significant difference ($p<0.001$) between these groups in the July and August values. Milk components of Group B slightly differed from those of Group A before the supplementation, but after the supplementation, concentrations and total amounts of fat, protein and solid non-fat significantly increased more in Group B than in Group A. Thus mixed feed containing dextran can increase the milk production of Holstein dairy cows in the hot season.

L23 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:678241 CAPLUS
DOCUMENT NUMBER: 145:130845
TITLE: Therapeutic delivery system comprising a high molecular weight PEG-like compound
INVENTOR(S): Alverdy, John C.; Chang, Eugene B.; Petrof, Elaine O.
PATENT ASSIGNEE(S): University of Chicago, USA
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2006073430	A2	20060713	WO 2005-US13465		20050420
WO 2006073430	A9	20061012			
WO 2006073430	A3	20061207			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
AU 2005323502	A1	20060713	AU 2005-323502		20050420
CA 2563511	A1	20060713	CA 2005-2563511		20050420
EP 1744767	A2	20070124	EP 2005-856625		20050420
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU					
CN 1964725	A	20070516	CN 2005-80018362		20050420
PRIORITY APPLN. INFO.:			US 2004-564031P	P	20040420
			WO 2005-US13465	W	20050420

AB The present invention provides a system for delivering a wide range of chemical and biol. therapeutics, including protein therapeutics, via transepithelial routes. The system comprises a high mol. weight polyethylene glycol-like (HMW PEG-like) compound for use with a therapeutic compound Optionally, the system comprises a composition containing one or more HMW PEG-like compds. and one or more therapeutics, supplemented with a protective polymer such as dextran and/or essential pathogen nutrients such as L-glutamine. Administered alone, the HMW PEG-like compds. also provide therapeutic benefits. Also provided are methods for preventing or treating epithelial diseases, disorders, or conditions, such as an epithelium at risk of developing gut-derived sepsis attributable to an intestinal pathogen, as well as methods for monitoring the administration of HMW PEG-like compds. Thus, HMW PEG reduced the mortality rate attributable to gut-derived sepsis in mice subjected to surgical intervention in the form of a partial hepatectomy. It is expected that HMW PEG therapy will be effective in methods of preventing death or serious illness associated with sepsis when implemented following the physiol. stress (e.g., during postoperative care). Further, HMW PEG therapy may be used prior to physiol. stressing (e.g., preoperative care), under circumstances where introduction of the stress is predictable, to lower the risk of serious illness or death.

L23 ANSWER 2 OF 3 MEDLINE on STN
ACCESSION NUMBER: 2006578588 MEDLINE
DOCUMENT NUMBER: PubMed ID: 17008159
TITLE: Emerging fermentation technologies: development of novel sourdoughs.
AUTHOR: Lacaze G; Wick M; Cappelle S
CORPORATE SOURCE: Puratos Group, BU Bioflavors, Industrialaan, 25, 1702 Groot-bijgaarden, Belgium.
SOURCE: Food microbiology, (2007 Apr) Vol. 24, No. 2, pp. 155-60. Ref: 16
Journal code: 8601127. ISSN: 0740-0020.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200702
ENTRY DATE: Entered STN: 30 Sep 2006
Last Updated on STN: 21 Feb 2007
Entered Medline: 20 Feb 2007

AB The increasing knowledge of sourdough fermentation generates new opportunities for its use in the bakery field. New fermentation technologies emerged through in depth sourdough research. Dextrans are extracellular bacterial polysaccharides produced mainly by lactic acid bacteria (LAB). These bacteria convert sucrose thanks to an inducible enzyme called dextransucrase into dextran and fructose. The structure of dextran depends on the producing micro-organism and on culture conditions. Depending on its structure, dextran has specific properties which lead to several industrial applications in different domains. The use of dextran is not widely spread in the bakery field even if its impact on bread volume and texture was shown. A new process has been developed to obtain a sourdough rich in dextran using a specific LAB strain able to produce a sufficient amount of HMW dextran assuring a significant impact on bread volume. The sourdough obtained permits to improve freshness, crumb structure, mouthfeel and softness of all kinds of baked good from wheat rich dough products to rye sourdough breads. From fundamental research on dextran technology, a new fermentation process has been developed to produce an innovative functional ingredient for bakery industry.

L23 ANSWER 3 OF 3 MEDLINE on STN
ACCESSION NUMBER: 91104071 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1702979
TITLE: Exocellular polysaccharides produced by lactic acid bacteria.
AUTHOR: Cerning J
CORPORATE SOURCE: Station de Recherches Laitieres, CRJ, INRA Jouy-en-Josas, France.
SOURCE: FEMS microbiology reviews, (1990 Sep) Vol. 7, No. 1-2, pp. 113-30. Ref: 94
Journal code: 8902526. ISSN: 0168-6445.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199102
ENTRY DATE: Entered STN: 29 Mar 1991
Last Updated on STN: 29 Jan 1996
Entered Medline: 25 Feb 1991

AB The production of homopolysaccharides (dextrans, mutans) and heteropolysaccharides by lactic acid bacteria , their chemical composition, their structure and their synthesis are outlined. Mutans streptococci, which include Streptococcus mutans and S.

sobrinus produce soluble and insoluble alpha-glucans. The latter may contain as much as 90% alpha-1-3 linkages and possess a marked ability to promote adherence to the smooth tooth surface causing dental plaque. Dextrans produced by Leuconostoc mesenteroides are high molecular weight alpha-glucans having 1-6, 1-4 and 1-3 linkages, varying from slightly to highly branched; 1-6 linkages are predominant. Emphasis is put on exopolysaccharide producing thermophilic and mesophilic lactic acid bacteria, which are important in the dairy industry. The produced polymers play a key role in the rheological behaviour and the texture of fermented milks. One of the main problems in this field is the transitory nature of the thickening trait. This instability is not yet completely understood. Controversial results exist on the sugar composition of the slime produced, but galactose and glucose have always been identified with galactose predominating in most cases.

L24 ANSWER 22 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:878040 CAPLUS
DOCUMENT NUMBER: 123:284098
TITLE: Microbiological and chemical composition of "sugar" Kefir grains
AUTHOR(S): Galli, A.; Fiori, E.; Franzetti, L.; Pagani, M. A.; Ottogalli, G.
CORPORATE SOURCE: Dipartimento di Scienze e Tecnologie Alimentari e Microbiologiche, Univ. delgi Studi di Milano, Milan, Italy
SOURCE: Annali di Microbiologia ed Enzimologia (1995), 45(Pt. 1), 85-95
CODEN: AMEZAB; ISSN: 0003-4649
PUBLISHER: Universita degli Studi di Milano
DOCUMENT TYPE: Journal
LANGUAGE: Italian
AB Some different Kefir grains used for the preparation of the acid-alc. beverage called sugar kefir have been examined on the structural, chemical and microbiol. point of view. They were irregular in shape and had a diameter going from a few mm to several cm; white hyaline color, translucent, unelastic and rather fragile; and 95-97% are composed of polysaccharides (dextrans) with chains of glucose only. Inside the matrix the lactic acid bacteria L. casei subsp. casei e L. casei subsp. pseudoplantarum, Leuconostoc spp. and Pediococcus spp.) were found but not the yeasts (S. cerevisiae, and Hanseniaspora spp.) which are located in the interstitial liquid; therefore they are detectable by cultural assay and optical microscopy, but cannot be observed by scanning electronic microscopy. Lactic acid bacteria , L. casei subsp. casei and L. casei subsp. pseudoplantarum, are considered to be responsible for the polymers production

L24 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:878038 CAPLUS
DOCUMENT NUMBER: 123:338012
TITLE: Microbiological and chemical characterization of "sugar grains".
AUTHOR(S): Zacconi, C.; Dallavalle, P.; Vescovo, M.; Parisi, M. G.; Scolari, G.
CORPORATE SOURCE: Istituto di Microbiologia, Univ. Cattolica del Sacro Cuore, Piacenza, 29100, Italy
SOURCE: Annali di Microbiologia ed Enzimologia (1995), 45(Pt. 1), 27-36
CODEN: AMEZAB; ISSN: 0003-4649
PUBLISHER: Universita degli Studi di Milano
DOCUMENT TYPE: Journal
LANGUAGE: English
AB "Sugar grains", named Tibi grains, used for producing a midly-acid alc. beverage, have been studied. The microbiol. study has been carried out under different culture conditions. Several bacterial groups have been found: yeasts, lactic acid bacteria as Lactobacillus hilgardii, Lactobacillus casei and various contaminants assigned to Klebsiella oxytoca, Enterobacter cloacae and other Gram neg. bacteria. Enzymic treatments of the grains indicate that they are constituted of dextrans.

L24 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:20704 CAPLUS
DOCUMENT NUMBER: 114:20704
TITLE: Separation of acid-resistant strains of lactic acid bacteria and their utilization. (V). Isolation and cultural characters of Leuconostoc mesenteroides subsp. mesenteroides from a denatured coffee flavored milk

AUTHOR(S): Kushii, Mituo; Hara, Kazushi
CORPORATE SOURCE: Aichiken Kogyo Gijutsu Cent., Japan
SOURCE: Kenkyu Hokoku - Ehime-ken Kogyo Gijutsu Senta (1989), 27, 33-6
CODEN: KHESEZ; ISSN: 0286-1844
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Two strains of L. mesenteroides mesentroides were isolated from spoiled coffee-flavored milk. These strains, named OR-1 and OR-2, produced a dextran-like substance from sucrose at 10, 15, and 20° after 3-4 days. However, no dextran-like substance was formed at 5°. When the strains were cultured in coffee-flavored milk containing sucrose at 10-20°, gelatinization occurred 3-4 days later.

L24 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:20315 CAPLUS
DOCUMENT NUMBER: 100:20315
TITLE: Comparative study of the efficiency of some additives in protecting lactic acid bacteria against freeze-drying
AUTHOR(S): Font de Valdez, Graciela; Savoy de Giori, Graciela; Pesce de Ruiz Holgado, Aida; Oliver, Guillermo
CORPORATE SOURCE: Fac. Bioquim. Quim. Farm., UNT, San Miguel de Tucuman, 4000, Argent.
SOURCE: Cryobiology (1983), 20(5), 560-6
CODEN: CRYBAS; ISSN: 0011-2240
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cultures of 14 lactic acid bacteria species were freeze-dried in 10 or 20% non-fat skim milk and in distilled water containing bovine albumin, glycogen, dextran, polyethylene glycol (PEG) 1000, PEG 4000, PEG 6000, glycerol, β-glycerophosphate, Na glutamate, asparagine, or cysteine. Each of the potential protective agents tested exhibited marked variations in the protection afforded to different species; none was effective for the preservation of viability of thermophilic lactobacilli. However, glycerol provided effective protection for L. leichmannii ATCC 4797 (90% survival), whereas L. bulgaricus ATCC 11842 reached a viability of 78% with 0.04M cysteine.

L24 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:401499 CAPLUS
DOCUMENT NUMBER: 93:1499
TITLE: Inhibitory effect of tannic acid on lactate metabolism in human saliva
AUTHOR(S): Iizuka, Susumu
CORPORATE SOURCE: Dep. Biochem., Nippon Dent. Univ., Tokyo, Japan
SOURCE: Shigaku (1980), 67(5), 770-8
CODEN: SHIGAZ; ISSN: 0371-0068
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Lactate [50-21-5] production during the incubation of human saliva with glucose [50-99-7], fructose [57-48-7], galactose [59-23-4], sucrose [57-50-1], maltose [69-79-4], or lactose [63-42-3] was strongly inhibited by tannic acid. Breakdown of dextran [9004-54-0] in the saliva was also strongly inhibited by tannic acid. Lactate production from glucose by Streptococcus mutans and other lactic acid bacteria was inhibited by tannic acid, but albumin reduced the effect of tannic acid on lactate formation by Streptococcus mutans.

L24 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:37344 CAPLUS
DOCUMENT NUMBER: 92:37344
TITLE: Electron microscopy of the dextrans produced by

lactic acid bacteria
AUTHOR(S): Brooker, B. E.
CORPORATE SOURCE: Natl. Inst. Res. Dairy., Shinfield/Reading, UK
SOURCE: Special Publications of the Society for General Microbiology (1979), 3(Microb. Polysaccharides Polysaccharases), 85-115
CODEN: SPSMDQ; ISSN: 0197-1751
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with many refs.

L24 ANSWER 28 OF 33 MEDLINE on STN
ACCESSION NUMBER: 2006578588 MEDLINE
DOCUMENT NUMBER: PubMed ID: 17008159
TITLE: Emerging fermentation technologies: development of novel sourdoughs.
AUTHOR: Lacaze G; Wick M; Cappelle S
CORPORATE SOURCE: Puratos Group, BU Bioflavors, Industrialaan, 25, 1702 Groot-bijgaarden, Belgium.
SOURCE: Food microbiology, (2007 Apr) Vol. 24, No. 2, pp. 155-60. Ref: 16
Journal code: 8601127. ISSN: 0740-0020.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200702
ENTRY DATE: Entered STN: 30 Sep 2006
Last Updated on STN: 21 Feb 2007
Entered Medline: 20 Feb 2007
AB The increasing knowledge of sourdough fermentation generates new opportunities for its use in the bakery field. New fermentation technologies emerged through in depth sourdough research. Dextrans are extracellular bacterial polysaccharides produced mainly by lactic acid bacteria (LAB). These bacteria convert sucrose thanks to an inducible enzyme called dextransucrase into dextran and fructose. The structure of dextran depends on the producing micro-organism and on culture conditions. Depending on its structure, dextran has specific properties which lead to several industrial applications in different domains. The use of dextran is not widely spread in the bakery field even if its impact on bread volume and texture was shown. A new process has been developed to obtain a sourdough rich in dextran using a specific LAB strain able to produce a sufficient amount of HMW dextran assuring a significant impact on bread volume. The sourdough obtained permits to improve freshness, crumb structure, mouthfeel and softness of all kinds of baked good from wheat rich dough products to rye sourdough breads. From fundamental research on dextran technology, a new fermentation process has been developed to produce an innovative functional ingredient for bakery industry.

L24 ANSWER 29 OF 33 MEDLINE on STN
ACCESSION NUMBER: 2006521977 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16946611
TITLE: Effect of Weissella cibaria isolates on the formation of Streptococcus mutans biofilm.
AUTHOR: Kang M-S; Chung J; Kim S-M; Yang K-H; Oh J-S
CORPORATE SOURCE: Department of Microbiology and Immunology, School of Medicine, Chonnam National University, Gwangju, Korea.
SOURCE: Caries research, (2006) Vol. 40, No. 5, pp. 418-25.
Journal code: 0103374. ISSN: 0008-6568.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: (CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)
(CLINICAL TRIAL)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 200610
ENTRY DATE: Entered STN: 2 Sep 2006
Last Updated on STN: 1 Nov 2006
Entered Medline: 31 Oct 2006

AB The objective of this study was to isolate and identify lactic acid bacteria able to inhibit the in vitro formation of Streptococcus mutans biofilm as well as the in vivo formation of oral biofilm. Two strains, CMS1 and CMS3, exhibiting profound inhibitory effects on the formation of S. mutans biofilm and the proliferation of S. mutans, were isolated from children's saliva and identified as Weissella cibaria by 16S rDNA sequencing. The water-soluble polymers produced from sucrose by the W. cibaria isolates also inhibited the formation of S. mutans biofilm. According to the results of thin-layer chromatographic analysis, the hydrolysates of water-soluble polymers produced by the isolates were identical to those of dextran, forming mostly alpha-(1-6) glucose linkages. In the clinical study, the subjects mouthrinsed with a solution containing W. cibaria CMS1 evidenced plaque index reduction of approximately 20.7% ($p < 0.001$). These results indicate that the W. cibaria isolates possess the ability to inhibit biofilm formation, both in vitro and in vivo.

L24 ANSWER 30 OF 33 MEDLINE on STN
ACCESSION NUMBER: 96097161 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7476564
TITLE: Biodiversity of lactic acid bacteria from food-related ecosystems.
AUTHOR: Damelin L H; Dykes G A; von Holy A
CORPORATE SOURCE: Department of Microbiology, University of the Witwatersrand, Johannesburg, South Africa.
SOURCE: Microbios, (1995) Vol. 83, No. 334, pp. 13-22.
Journal code: 0207257. ISSN: 0026-2633.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199512
ENTRY DATE: Entered STN: 24 Jan 1996
Last Updated on STN: 24 Jan 1996
Entered Medline: 21 Dec 1995

AB The diversity of lactic acid bacteria within a variety of food-related ecosystems was assessed and the strain as well as environment specific characteristics were investigated. The strains (108 in toto) were isolated from plant material, traditional fermented foods, dried marine algae, sea food, fungi as well as spoiled foods and beverages, and all were characterized to genus level. Lactobacillus strains dominated all ecosystems and contributed to 65% of the isolates while a further 13% consisted of Lactococcus strains, 12% of Leuconostoc strains, 5% of Pediococcus strains, and 5% of unidentified strains. Plant material was the most diverse ecosystem containing representatives from each of the genera as well as the majority of dextran and tyramine producers. Those strains able to grow at 45 degrees C as well as acid tolerant strains were predominantly isolated from traditional fermented beverages while halotolerant strains occurred mainly in sea food. Two bacteriocin producers but no histamine producers were isolated.

L24 ANSWER 31 OF 33 MEDLINE on STN
ACCESSION NUMBER: 96084051 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7488529
TITLE: Differentiation of dextran-producing Leuconostoc strains

from fermented rice cake (puto) using pulsed-field gel electrophoresis.
AUTHOR: Kelly W J; Asmundson R V; Harrison G L; Huang C M
CORPORATE SOURCE: Horticulture and Food Research Institute, Batchelar Research Centre, Palmerston North, New Zealand.
SOURCE: International journal of food microbiology, (1995 Aug) Vol. 26, No. 3, pp. 345-52.
Journal code: 8412849. ISSN: 0168-1605.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199601
ENTRY DATE: Entered STN: 25 Jan 1996
Last Updated on STN: 25 Jan 1996
Entered Medline: 4 Jan 1996

AB Lactic acid bacteria were isolated from puto, a fermented rice cake consumed as a breakfast and snack food in the Philippines. The microflora was dominated by dextran-producing leuconostocs, and these were differentiated into four groups using pulsed-field gel electrophoresis of restriction enzyme digested chromosomal DNA, in conjunction with taxonomic tests. The four groups corresponded to the species Leuconostoc mesenteroides subsp. mesenteroides, Leuconostoc pseudomesenteroides, Leuconostoc citreum and Leuconostoc fallax. Several strains showed an unusual clumping phenotype, and two of these were capable of inhibiting other strains of lactic acid bacteria.

L24 ANSWER 32 OF 33 MEDLINE on STN
ACCESSION NUMBER: 91104071 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1702979
TITLE: Exocellular polysaccharides produced by lactic acid bacteria.
AUTHOR: Cerning J
CORPORATE SOURCE: Station de Recherches Laitieres, CRJ, INRA Jouy-en-Josas, France.
SOURCE: FEMS microbiology reviews, (1990 Sep) Vol. 7, No. 1-2, pp. 113-30. Ref: 94
Journal code: 8902526. ISSN: 0168-6445.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199102
ENTRY DATE: Entered STN: 29 Mar 1991
Last Updated on STN: 29 Jan 1996
Entered Medline: 25 Feb 1991

AB The production of homopolysaccharides (dextrans, mutans) and heteropolysaccharides by lactic acid bacteria , their chemical composition, their structure and their synthesis are outlined. Mutans streptococci, which include Streptococcus mutans and S. sobrinus produce soluble and insoluble alpha-glucans. The latter may contain as much as 90% alpha-1-3 linkages and possess a marked ability to promote adherence to the smooth tooth surface causing dental plaque. Dextrans produced by Leuconostoc mesenteroides are high molecular weight alpha-glucans having 1-6, 1-4 and 1-3 linkages, varying from slightly to highly branched; 1-6 linkages are predominant. Emphasis is put on exopolysaccharide producing thermophilic and mesophilic lactic acid bacteria, which are important in the dairy industry. The produced polymers play a key role in the rheological behaviour and the texture of fermented milks. One of the main problems in this field is the transitory nature of the thickening trait. This instability is not yet completely understood. Controversial results exist

on the sugar composition of the slime produced, but galactose and glucose have always been identified with galactose predominating in most cases.

L24 ANSWER 33 OF 33 MEDLINE on STN
ACCESSION NUMBER: 84027738 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6194937
TITLE: Comparative study of the efficiency of some additives in protecting lactic acid bacteria against freeze-drying.
AUTHOR: Font de Valdez G; Savoy de Giori G; Pesce de Ruiz Holgado A; Oliver G
SOURCE: Cryobiology, (1983 Oct) Vol. 20, No. 5, pp. 560-6. Journal code: 0006252. ISSN: 0011-2240.
PUB. COUNTRY: United States
DOCUMENT TYPE: (COMPARATIVE STUDY) Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198312
ENTRY DATE: Entered STN: 19 Mar 1990 Last Updated on STN: 3 Mar 2000 Entered Medline: 20 Dec 1983

AB Cultures of 14 lactic acid bacteria species were freeze-dried in 10 or 20% non-fat skim milk and in distilled water containing one of the following additives: bovine albumin, glycogen, dextran, polyethylene glycol (PEG) 1000, PEG 4000, PEG 6000, glycerol, beta-glycerophosphate, sodium glutamate, asparagine, or cysteine. Each of the potential protective agents tested exhibited marked variations in the protection afforded to different species, none of them was effective for the preservation of viability of thermophilic lactobacilli. However, glycerol provided effective protection for L. leichmannii ATCC 4797 (90% survival), while L. bulgaricus ATCC 11842 reached a viability of 78% with 0.04 M cysteine.